# MAKING THE OFFICE PAY

PROPERTY OF
Educational
Division
THE SHELDON SCHOOL
No. 603 Date

#54

Daily Report from Information Desk, Feb. 26

1 CALLERS

a Number of callers

b Departments called for

| Administration | Sales | Credit | Collection | Advertising | Production |
|---|---|---|---|---|---|
| ~~HH~~ / | // | | /// | // | /// |

2 LETTERS

a Incoming mail– time received

| | 1 | 2 | 3 | 4 | 5 | Reasons if any for delay |
|---|---|---|---|---|---|---|
| Time received | 8:40 | 9:05 | 9:35 | 1:25 | 2:15 | |
| Time delivered | 8:45 | 9:10 | 9:45 | 1:30 | 2:30 | Sent on Errand |

b Filing — Answer Yes or No. If "No" give the reason why

| | | |
|---|---|---|
| Marked for file | Yes | |
| Filed | Yes | |

c Searching Files: number searched for ~~HH~~ ///

3 MESSENGER COLLECTIONS AND DELIVERIES

| | Scheduled | Actual | Reason for delay | Scheduled | Actual | Reason for delay |
|---|---|---|---|---|---|---|
| Time started | 9: | 9: | | 1:30 | 1:30 | |
| | 10: | 10: | | 2:30 | 2:30 | |
| | 11: | 11: | | 3:30 | 3:30 | |
| | | | | 4:30 | 4:30 | |

4 CALL BELL

a Morning

b Noon (11:15 to 12:30)

c Afternoon

5 PHOTOS AND DRAWINGS FILED

Number filed 10

If none, give reason why:

6 MAGAZINES

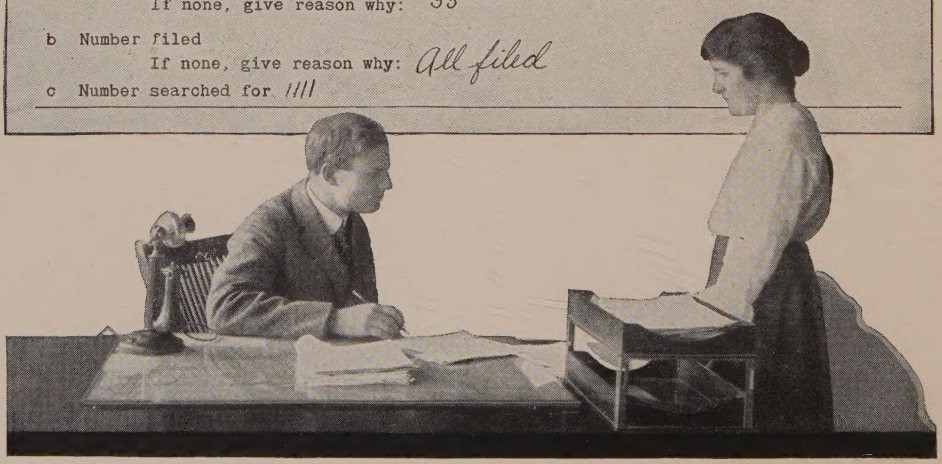
a Number checked and slips written

If none, give reason why: 35

b Number filed

If none, give reason why: All filed

c Number searched for ////



This sheet, which contains a list of all the tasks for which the employee is responsible, illustrates a plan that has helped one executive to speed up the routine in his office.

Practical business men in many offices have found that where an employee is held solely responsible for certain tasks—as with this plan—chances of error are greatly lessened.

# MAKING THE OFFICE PAY

TESTED OFFICE PLANS, METHODS, AND SYSTEMS THAT MAKE FOR BETTER RESULTS FROM EVERYDAY ROUTINE, SECURED FROM THE OFFICES OF THE HUNDREDS OF SUCCESSFUL BUSINESS MEN WHO ARE USING THEM TO INCREASE PROFITS BY CUTTING COSTS

EDITED BY W. H. LEFFINGWELL
AUTHOR OF "SCIENTIFIC OFFICE MANAGEMENT"

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Printed in U. S. A.

# HOW TO GET THE GREATEST VALUE FROM THIS BOOK

HERE is a book with page after page of helpful and interesting information about running an office at the greatest profit to yourself. You will see at a glance that this information quite obviously has been collected from every nook and cranny of effective office management.

Now the question is simply how to use this information in getting the most out of your office. You will find that the book is so arranged that it is exceptionally easy to read; only the most important information has been used and no wading through a lot of reading matter is necessary in order to get at this information. The index in the back literally puts every fact in the book at your finger tips, and there are a lot of illustrations specially secured to drive home the vital points at a glance.

There are two ways to make this book one of the most valuable assistants in your office. The first way is to pick one out of your specific and most difficult problems—it may be the correct routing of work, increasing the output of typists, or the hiring and training of employees. Turn to the index under "Routing" or "Typists" or "Employment" and find just the method that some other manager has used to solve the same problem that is now confronting you.

Then study carefully his solution. Never mind if his business isn't the same as yours—it is a demonstrated fact that nine out of every ten plants which succeed with one type of proposition can be used for almost all other types. And the increasing intensity of the competition which business men face nowadays makes it necessary for them to draw their ideas from more than one type of proposition.

Approach your problem from the same angle as the manager whose solution is given; then approach it from every other angle possible. Jot down on a convenient sheet of paper every little circumstance which enters into your problem and then see how each of those circumstances has already been met, and how you can make the same application in your office. This thorough analysis may reveal to you possibilities in the management of your office which you had not dreamed of.

A second way to make this book work for you is first carefully to read the book through once. When this reading is completed, you will

find it useful to read every page a second time. As you read, put down any thought or ideas that occur to you at the time. If necessary write them down in the margin of the book or on the flyleaf or the inside cover—anywhere, as long as you get it down. Also mark any passages that appeal to you, and when you go over the book the second time, note on the inside cover of the book any other pages you want to study particularly.

W. H. Leffingwell uses a looseleaf binder to hold the notes he makes. At the top of a single sheet he writes any memorandum he wants to preserve for future reference and study. Then at spare moments he takes up this book and pages through it, reading each idea. This rereading of the ideas causes new thoughts on the various subjects and he jots down the new thoughts right under the others. Some ideas develop rapidly, while others are slower. In speaking of how he develops ideas from his reading, Mr. Leffingwell says: "One day this thought came to me: 'When the muscles are trained to act involuntarily, speed is increased. How can I take advantage of this fact?'

"That was all I put down on the pages. Time after time I thumbed over that page, but nothing came of it. One day when I was feeling very dull and was paging my note book for stimulation, my eyes rested for a moment on this page and I added the note:

"'By standardizing methods.'

"Still the statement seemed to be but a barren fact. On another day I added this note:

"'Find a clerical operation with repetitive motions which are not standardized.'

"The idea was growing. The next time I came to that page I made mental note of every operation in the office; but since most of these operations were standardized, I could not readily think up a method of improvement. Then I decided to go and watch each one of the operations. Almost the first operation I observed was opening the mail. Already the clerks were performing this operation at high speed. In watching them this time, however, I noticed a lot of tiny, ineffectual motions which had escaped my attention. These consisted of reaching twice for pins because the pin tray had been moved a couple of inches. Speed was lost because involuntary action was thwarted.

"Like a flash the whole idea developed. Those pins should be in a pincushion weighted with sand and the cushion fastened to the table.

"I then proceeded to design a special table for mail opening. Everything used by the worker had a definite place, and that place was fixed by a depression in the desk so that the necessity of raising the hand was avoided, no matter how fast or slow the work.

"When this table was finally built, the speed of the clerks on this operation was so increased that three girls could do the work formerly done by four. And all because my book had saved an idea."

You will be surprised at the number of suggestions which will occur to you. From one idea another will germinate; one method will instantly suggest something else that will possibly save still more time, eliminate waste, conserve energy, and boost profits. For here are laid bare not only the big vital principles behind office management, but also the effective plans and methods that have followed the operation of these principles. By these principles and plans, firms all over the country are actually developing efficient employees low-cost departments and saving hundreds upon hundreds of dollars. Perhaps just one of these plans or methods will save the cost of several employees, and actually mean hundreds, perhaps even thousands of dollars to you, also.

## EDITOR'S NOTE

THE principle of re-use, as worked out by efficiency engineers, or in other words, the making use of labor once performed, is now a well-recognized source of efficiency. This book presents an excellent example of its value.

Unconsciously we all use this principle, not only in the management of our business, but in all of our undertakings. If we did not we would have to start life as savages and never progress beyond that stage. As Newton said, "We stand on the shoulders of giants." But it is this blind use of the principle which renders it too commonplace and so often retards our progress!

Men who have succeeded have not considered this principle insignificant but have regarded it in the light of a discovery whose vital force is spent unless they were not always mindful of its potency, but constantly on the alert to apply it.

The mere collecting and compiling of the data contained in this book, represents several years of effort on the part of the publishers, to say nothing of the many years of thought, study, and experiment on the part of the hundreds of office managers and executives who originated and worked out the ideas and plans outlined. In truth the book may well be termed "the shoulder of giants" on which the reader may stand as he applies this well-known efficiency principle to his work.

Many of the plans outlined in the book have come under my personal observation; some were originated and developed by me, while others were gathered out of the experiences of successful office managers. All of them are based on sound office efficiency principles and have worked out successfully under everyday business conditions.

The reader will do well to study closely the preface, for it contains valuable suggestions on how to proceed in order to derive the greatest value out of the book, always bearing in mind that the mere "reading" of the book will be of little or no avail unless the principles expressed in it are applied to the reader's business requirements.

W. H. LEFFINGWELL

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## CHAPTER I

# KEEPING TAB ON OFFICE WORK

**How one man watches work in his office**

A DISTRICT superintendent of one of the telegraph companies uses a 5- by 8-inch card of his own design which he calls a "schedule and dispatch sheet." This is ruled in four columns, and headed as follows: "schedules," "work of," "subject," and "file." He keeps the sheet on his desk. In the first column appears the date on which the job must be completed. In the second is the name of the man responsible for its completion. In the third is a note about the job itself. And in the fourth appears a note indicating the file where the particulars are to be found.

As the items are completed, they are crossed off with ink or pencil. When a page has been filled and most of the jobs finished, those still uncompleted are transferred to the next sheet and the old one is destroyed. The superintendent, as well as his assistant and the head stenographer, each have a copy, so that there is a triple check to avoid oversight.

**A planning board that keeps the jobs in sight**

Above his desk the superintendent has a planning board with thirteen horizontal divisions. Each represents one of the affairs that come regularly under his supervision. The perpendicular rulings are merely those of a tickler—in other words, the days of the week, "one week," "two weeks," "three weeks," "one month," and the twelve months. In each square is a hook, and on it may be hung a small card.

This board serves in the routine work the same function that the "schedule and dispatch sheet" serves for unusual jobs.

When work has the habit of piling up in a department, some form of planning board can often be used to do away with the difficulty. The manager of one office found the remedy in a work board divided into two sections—one

**Red cards have the right of way**

was red and the other black. The red portion he reserved for emergency and rush jobs, and the black for routine. A vertical column for each member of the office force shows to whom a job is assigned.

Three by five-inch cards are used in connection with the board. Each card has spaces where the executive may indicate to whom the order is issued, what it covers, and to whom the work goes next. The cards are punched at the top to fit over hooks on the board. If a card hangs in the first position of the red division, it has the right of way over anything else in that employee's column. All work in the red portion has precedence over the black. Time spent on a job must be shown on the slip, thus affording a check on the speed of the worker.

Usually prompt completion of work without congestion can be watched best with the aid of some mechanical device—such as a plan board or a chart—in much the way preferred by this superintendent. The managing editor of a well-known magazine uses a plan board that is unusual in that it emphasizes work undone rather than recording work completed.

**You probably can adopt this plan without difficulty**

The progress-of-work chart used by this editor should be of value in watching other kinds of office work, inasmuch as the time it takes is an important element in almost all tasks.

A red "danger signal" for warning the editor against work left undone is the basis of this progress board. A huge printing press lying idle, awaiting the run that it has been reserved for, is just as idle and eats up expense charges just as fast because it is held for a single line as because a whole article is missing. The fact that there are any undone steps is the vital point.

Just as almost any completed office work is made up of a number of parts or steps, so a managing editor's output is built up. Each article must be edited, put into type, illustrated, and supplied with a head or title. The chart formerly used to keep track of the progress of an issue consisted of a sheet listing the individual articles in a column at the left. At the right, columns were headed with the different steps, and a checkmark was made when a particular step was completed. This answered very well until the issue was fairly well along,

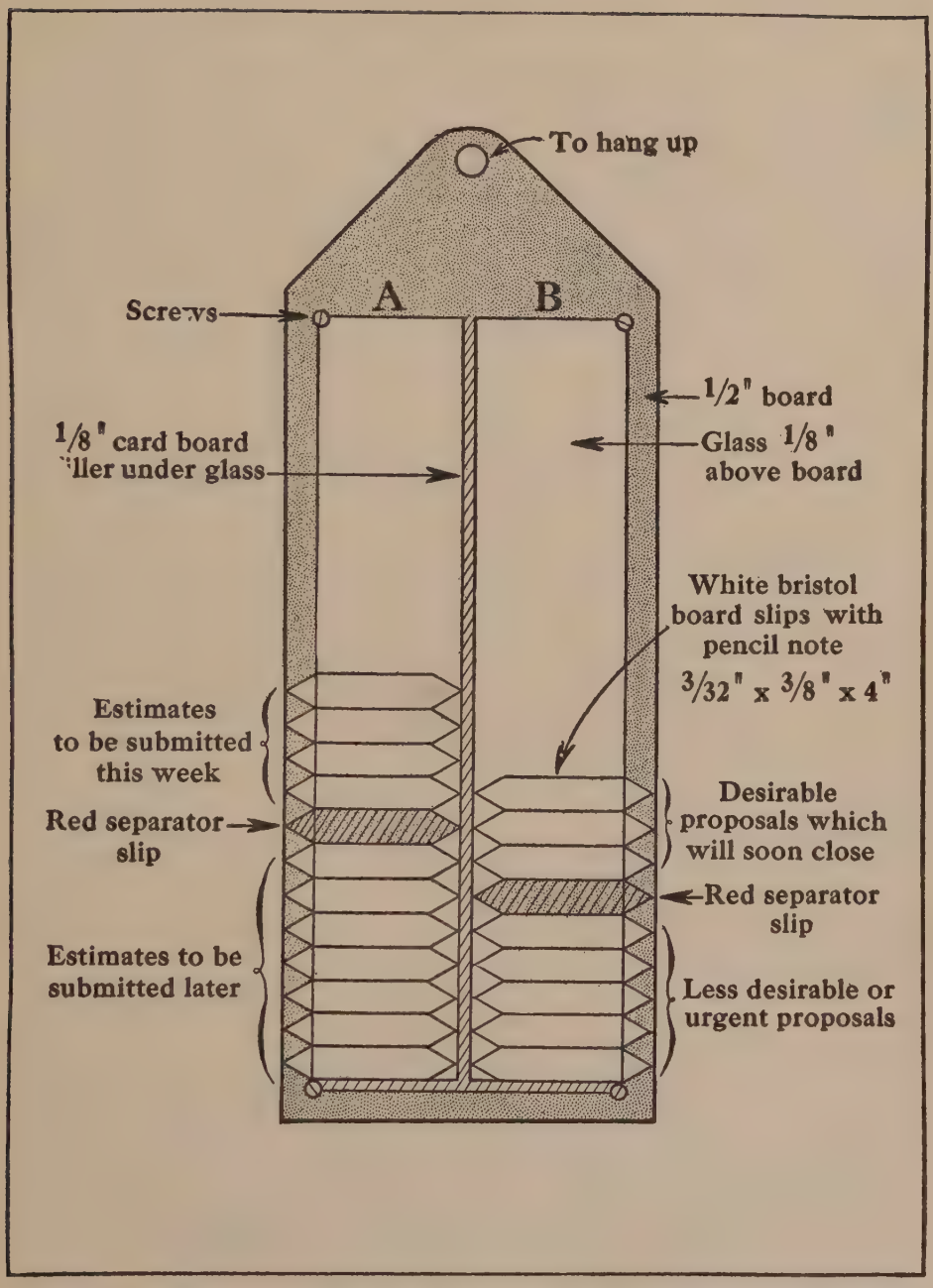
To hang up
A
B
Screws
1/2" board
1/8" card board filler under glass
Glass 1/8" above board
White bristol board slips with pencil note 3/32" x 3/8" x 4"
Estimates to be submitted this week
Red separator slip
Desirable proposals which will soon close
Red separator slip
Estimates to be submitted later
Less desirable or urgent proposals

FIGURE I: With the aid of this planning board the manager of one contracting concern is able—almost literally—to watch the progress from day to day of estimates that may mean large sums to his firm. Cards are inserted under the glass strips A and B, and shifted as the work progresses. He hangs it on the wall where it is always in sight.

**This board is easily and cheaply made**

and when the sheet became well filled with checkmarks. Then the white spaces or unfinished items became entirely insignificant amid the long rows of checks at a time when they should be particularly prominent.

This led to the development of the progress board which he now uses. With this, colored pasteboard disks an inch in diameter take the place of the checkmarks in the old scheme, or rather, take the place of a missing checkmark. These disks have a small hole punched in the center and slip over screw hooks on the boards.

In operation, each circle is covered with a colored disk at the start of the work. As each operation is performed, the particular disk that represents it is removed. The colored spots remaining on the board at any time thus show prominently the incomplete items and consequently those that need attention.

A card bearing the title of the article or in its wider application, the name of a part of the office routine, is similarly punched and mounted on screw hooks at the left of the board. The disks have to be punched but otherwise they are a standard product obtainable almost everywhere.

**Here bright-colored tags help to flag the attention**

The first part of the magazine runs in color and so must go to press before the rest. To indicate this, red discs are used for indicating the progress of articles included in the color form and blue ones are used elsewhere. The brightly colored spots against the dustproof light gray background are so prominent that there is little excuse for overlooking them. A variety of colors would increase the scope of usefulness for follow-up purposes in many lines of work.

To keep his eye constantly on the progress of every estimate, the manager of a Philadelphia contracting concern has a plan board of peculiar construction hanging on the wall in front of his desk. Figure 1 on page 3 shows how the board is constructed. It consists of a piece of plate glass screwed to a backing of fitted pine boards and rising an eighth of an inch above it. A strip of cardboard filler under the glass divides the board into two parts.

Cards are filled out to show work ahead, and they are inserted under the glass. Wooden pegs inserted in

holes in the board, and touching the glass, hold the cards in place.

**This board measures the relative importance of jobs**

Every Monday these cards are arranged anew in the order of their importance. Estimates which it is essential to submit during the current week are placed at the top of the left part. Below them is a red separator slip, and the cards that show estimates to be submitted later are filed underneath. At the right are filed, in the order of their urgency, proposals that will soon close with the less desirable proposals underneath.

As some matters become more important, and others less so, the cards are shifted accordingly. Kept constantly up to date in this way, the board represents at all times the amount of work ahead, and shows what needs to be done next.

**Did you ever play "office checkers"?**

Playing checkers during office hours is a habit with another man. A transformed card table as shown in Figure 2 is his checkerboard, and the "pieces" he uses are discs of various colors, on each of which is written the name of one of the employees coming under his supervision.

This office manager formerly had much difficulty in keeping an accurate record of his constantly shifting force. A card index failed to give him the results he wanted. He required a visible record which would show him at any time in the day the exact disposition of his force, as well as general facts that would help him to insure better control of the work.

Like many executives, he believes a mobile force of employees aids economy; for when one department is exceptionally busy, another may not have enough to do. With proper organization, employees in a comparatively idle department may be shifted to help another department through its temporary period of rush.

**Preventing congestion in departments**

In this office, when workers are transferred in this way to an overworked department, their disks are moved by the manager's secretary. She receives notification of the transfer from the division heads concerned.

Thus an unusual amount of work in any one department comes to the immediate attention of the manager, and he can either direct that no additional work be sent into the crowded department; or transfer sufficient

**What does the checkerboard do?**

additional workers to it from a less congested department.

In case of serious congestion, a small red flag mounted on a disk is placed on the checkerboard space which represents the crowded division. This is a signal that calls for the manager's immediate attention.

A white flag, similarly placed, means that the department thus indicated is able to spare part of its workers for service in some busier division. Just as soon as a division has returned to normal conditions through borrowed aid, the return of the workers to their own tasks is chronicled on the board simply by shifting disks. Thus the manager can see, without leaving his desk, that the usual routine has resumed.

The office checkerboard performs many other important services. It records tardiness and absences in a simple and satisfactory fashion. Late arrivals are reported by the office timekeeper to the manager's secretary. She inserts a small green thumb tack in the offender's checker. Absentees' disks are lifted from their places on the board and laid side by side in an absentee rack, which is provided at the side of the table. Here the checkers remain until the absentees return to work.

**Who are the tardy ones in your office?**

Tardiness signs remain on the disks throughout the day. Three days' tardiness in succession earns for the belated offender a black tack, which may lead to a talk by the manager. Members of the office force know how the tacks work on the manager's checkerboard, and this fact has had the effect of reducing the tardiness percentage.

By using checkers of various colors, the checkerboard gives much information of a miscellaneous nature that is very useful in regulating and controlling the work of the office.

White disks, for example, signify workers of ordinary ability—those whose tenure of employment has been brief and whose record for efficiency entitled them to no special consideration. Red disks indicate division heads—workers who deserve recognition because of their special executive qualities.

**Who are the punctual workers?**

Gold disks designate all those whose long and efficient service warrants the manager in entrusting them with much authority.

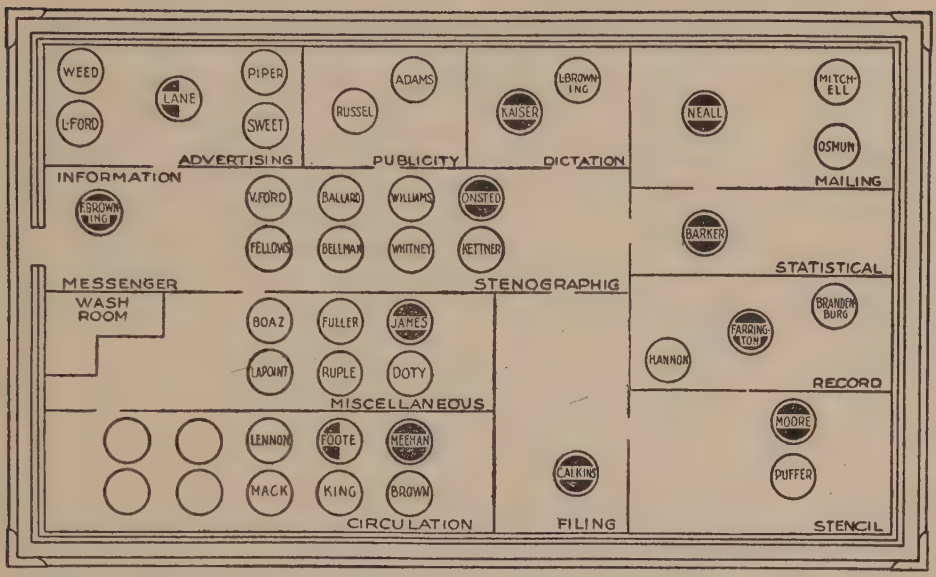


**FIGURE 2:** Refer to page 5 and you'll recognize the above as a "ground floor" view of the "office" checkerboard described there. Here you see just how it helps the office manager to keep his finger on every detail of the work. After you have studied the plan thoroughly, perhaps you will want one of these checkerboards for your own use.

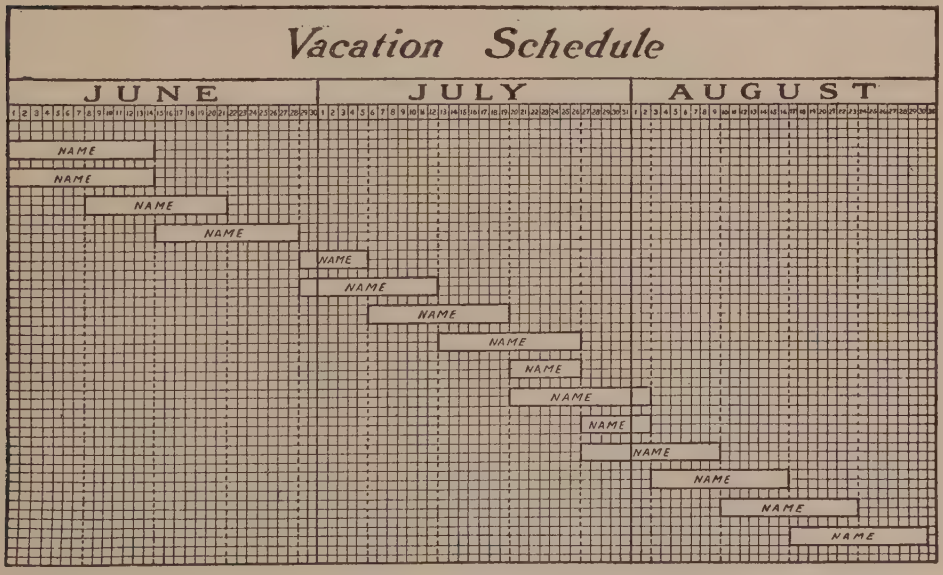


**FIGURE 3:** Here's a progress chart that takes care of a vacation schedule that won't "gum up" the business machinery. Once a schedule like this is drawn up, it shows at a glance just who is on vacation, or is yet to go, or has gone, at any stage of the vacation period, and the man in charge of the office can always lay out his plans in accordance.

**Some special jobs the checkerboard takes care of**

Disks half white and half red indicate workers of ordinary grade whose industry and adaptability place them in line for promotion. Blue disks without names indicate vacancies in the office force which need to be filled.

On occasion, the board can also be used to chronicle information regarding the progress of special tasks. Small squares of pasteboard are in readiness, and when the manager wishes to follow the progress of some particular work, one of these squares is placed in the proper position on the checkerboard, and is moved as the work progresses.

Thus, a square labeled "fall letter to Kansas list" can be transferred from one department to another as the work goes ahead. Reports come to the secretary regularly from the addressing, enclosing, and mailing divisions, and the square is moved along in accordance. If the square stops too long in any one division, that fact is apparent to the manager and he can take steps to hurry the work.

Information regarding office transfers, deserved promotions, and the like, comes to the manager's secretary from division heads in the form of office notes. The data represented is at once registered on the checkerboard, so the manager may see at a glance just what is taking place in the office without the need of really lengthy memoranda. The amount of time that is saved in this way is considerable. This man's plan frees his mind from the necessity of always asking himself whether details are being attended to.

**Do you use graphs?**

Graphic charts are used by many office managers for visualizing office conditions and tendencies. These same charts also can be made to show details of interest to other executives of the business.

One of the principal obstacles to the wider use of charts has been the fact that the average office manager believes it is necessary to employ a draftsman to make them up, and that expensive drawing instruments will have to be procured. It is true that the average clerk is not educated along these lines; but he very soon can be, for anyone of average intelligence may easily become expert at plotting and drawing curves. The drafting consists chiefly of drawing straight lines and a little

lettering, although a typewriter may be used for most of this.

**An effective way to show business tendencies**

One office manager introduced graphic records into his office to a large extent. He arranged with the head of another department, who had a draftsman in his employ, to allow the latter to put some of his time on the charts when he was not busy with other work. In a very short time the charts became so popular with the executive officers that they wanted nearly everything shown in picture form. The work finally became too heavy for the draftsman to keep up with in his spare time, so other arrangements had to be made.

The department head, therefore, took on a clerk who was able to use a typewriter, at about one half the salary paid to the draftsman. He taught him how to plot and draw charts, and kept him at this class of work almost entirely for about two months. At the end of this time the young man was able to make up charts faster and neater than the draftsman could. The work was done on a tabulating typewriter, which gives just as good results for the purpose as the best kind of hand printing, and is, of course, far more rapid.

**What is needed for making graphs?**

As to the cost of the necessary tools—$4 will more than cover the cost of a complete set.

The following list shows what is needed:

Three bottles of drawing ink, one each of black, green, and red
One ruling pen, 5½ inches long
One 18-inch celluloid straight edge
One 6-inch celluloid triangle
One fairly hard lead pencil
One piece of soft rubber.

The cross-section paper which is the most convenient for general use, is made in sheets 15 by 11 inches. This sheet is divided into squares, of which there are 24 one way and 20 the other. Each large square is subdivided into 10 small squares, making the total number of squares 240 one way and 200 the other. This permits the use of a great many kinds of headings for various purposes.

When it is desired to make a comparison of various years, a different color of ink should be used for each year. With this arrangement it is possible to draw charts on the same sheet for as many years as there are colors of ink.

**Some facts that graphs often will show to advantage**

Sometimes it is desired to make a comparison of several different items for one year, against the year before, on the same sheet. In order not to confuse the years with each other, it is necessary to show all items for one year in the same color of ink. Six different kinds of lines may be drawn in the same color of ink, and yet easily be distinguished one from the other.

Figure 3 shows a simple way of keeping tab on the vacation schedule. When a department employs a large number of men it is not easy, from a written schedule, to keep track of the number of men who will be away at a given time. With the arrangement shown here, the manager can see at a glance just how he will stand for help during any time in the vacation period. The office having only a dozen or so employees is particularly likely to be crippled if vacations are not properly scheduled. If, through an oversight, two clerks doing similar work are away at the same time, the whole office may be disorganized. A simple chart would probably avoid such mistakes.

## CHAPTER II

# GINGERING UP YOUR OFFICE

**Managing office men like newspaper reporters**

THE idea of having an assignment book for a business office," says an office manager, "occurred to me because I am an old newspaper man. The backbone and spine of the methods of a newspaper office, which gets out a complete newspaper every day, if not oftener, is the assignment book—backed up by 'the morgue.' The 'morgue' supplements the book, and is a collection of facts about events or people that 'have happened' and are quite likely to 'come back' at any time.

"An idea or fact that comes to the city editor's desk and is found to contain the germ of a 'story' is recorded in the assignment book and never lost sight of until thrashed out to a finish. The assignment book is, therefore, in one form or another, a record of coming events classified by days. Every working day, in other words, the editors have before them the first moment their desks are stripped for the day's work, a record of the events which are 'alive.'

**Listing the jobs**

"The staff gets its instructions for the day from this assignment book. This permits a sane, well-ordered distribution of the multitude of tasks to be done in a brief space of time.

"Of course, the larger percentage of the happenings that go to make up a paper is not known in advance. But the moment a 'tip' comes in, down it goes on 'the book' and some news-hustler's name goes down behind it on the instant.

"Sometimes the book is transcribed and each reporter gets a sheet, listing the tips he is to 'cover' or watch, checked against the city editor's copy. This was the method that appealed to me as having possibilities for transplanting into a business office, with results at least approximating those of the newspaper office.

**This plan was transplanted from one office to another and worked very well**

"I actually did do the transplanting, and the result has successfully withstood severe tests in the office of a factory. I am telling about the transplanted plan because I believe it has possibilities of being very widely used in all kinds of offices. As a matter of fact, it seems to me that the smaller office could use this plan to as good advantage as our own, for tasks in the small office are sometimes overlooked through there not being as exact division of duties as in the larger ones.

"The employees like the plan. It is not a club to force more work out of them, but rather a method of getting finished in a systematic manner the tasks that have to be done, so that when quitting time comes, they may, if they wish, go home and forget them."

**How the office "tickler" works**

This explains, in general, the broad operations behind the plan. To show how it actually works out is the purpose of this chapter. The record of work for an office or a department, corresponding to the newspaper's assignment book, is the work sheet. Each department head, and each employee under him, has a supply of memorandum pads, as shown in Figure 7. Actual instances of how these pads are used will best illustrate their purpose.

If Mr. Calder is expected, on the seventeenth of each month, to see that a complete report of sales, and the cost of sales, for the first 15 days of the month gets into the hands of the vice-president and treasurer, the form will be filled in with those instructions. On the morning of the sixteenth (or of the fifteenth, if necessary) this written notice is placed before Mr. Calder, and with it a list of all his other tasks for the day.

**A plan that keeps all work in sight constantly**

The file girl has many tasks to do, let us suppose, all of which are ticketed and shown on her work sheet until finished. While conscientious and always very busy, she may forget that the traffic manager has asked her to dig up certain papers tomorrow from the files.

The manager of detail, however, makes a reminder for her, or she makes out one herself; and the work sheet will flag her the first thing the next morning. A little thought will make it possible to place on record quickly any task or duty, due at any time, with the certainty that it will not be lost sight of until it is finished.

FIGURE 4: In one office where get-ahead methods are employed, each executive has a file drawer into which he can quickly sort the papers dropped into his receiving basket. This file classifies his work in the order of its importance and the speed with which he must do it, in order to keep up with his schedule. It's an excellent check on all work.

FIGURE 5: Fit the work to the worker is the watchword in this office. The tables are especially designed for the work these men are doing and they are just the right height to be comfortable and effective. The tables contain no drawers, and therefore there is no temptation to "ditch" work at night with the possibility of forgetting it.

## SAVE THE MINUTES! TIME IS THE MOST VALUABLE THING IN THE WORLD!!

The following table shows the amount that can be saved per year in wages by shortening the labor time required to perform an operation.

To save one minute in each hour worked, means a saving of 1.6% in the wage bill. In one year, one minute in each hour saved means a saving of 40 hours, nearly one week!

True efficiency means making every MINUTE count.

| Saving % of Time | Saving Min. per Hour | Means Saving Hours Per Year | Or a saving in the wage bill each year of the amounts shown below, according to the rate per hour | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 5c | 10c | 15c | 20c | 25c | 30c | 35c | 40c | 45c | 50c |
| .016 | 1 | 40 | $2 | $4 | $6 | $8 | $10 | $12 | $14 | $16 | $18 | $20 |
| .033 | 2 | 80 | 4 | 8 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| .05 | 3 | 120 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| .066 | 4 | 160 | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 |
| .082 | 5 | 200 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
| .10 | 6 | 240 | 12 | 24 | 36 | 48 | 60 | 72 | 84 | 96 | 108 | 120 |
| .116 | 7 | 280 | 14 | 28 | 42 | 56 | 70 | 84 | 98 | 112 | 126 | 140 |
| .133 | 8 | 320 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 |
| .15 | 9 | 360 | 18 | 36 | 54 | 72 | 90 | 108 | 126 | 144 | 162 | 180 |
| .166 | 10 | 400 | 20 | 40 | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 |
| .183 | 11 | 440 | 22 | 44 | 66 | 88 | 110 | 132 | 154 | 176 | 198 | 220 |
| .120 | 12 | 480 | 24 | 48 | 72 | 96 | 120 | 144 | 168 | 192 | 216 | 240 |
| .216 | 13 | 520 | 26 | 52 | 78 | 104 | 130 | 156 | 182 | 208 | 234 | 260 |
| .233 | 14 | 560 | 28 | 56 | 84 | 112 | 140 | 168 | 196 | 224 | 252 | 280 |
| .25 | 15 | 600 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 |
| .266 | 16 | 640 | 32 | 64 | 96 | 128 | 160 | 192 | 224 | 256 | 288 | 320 |
| .283 | 17 | 680 | 34 | 68 | 102 | 136 | 170 | 204 | 238 | 272 | 306 | 340 |
| .30 | 18 | 720 | 36 | 72 | 108 | 144 | 180 | 216 | 252 | 288 | 324 | 360 |
| .316 | 19 | 760 | 38 | 76 | 114 | 152 | 190 | 228 | 266 | 304 | 342 | 380 |
| .333 | 20 | 800 | 40 | 80 | 120 | 160 | 200 | 240 | 280 | 320 | 360 | 400 |
| .350 | 21 | 840 | 42 | 84 | 126 | 168 | 210 | 252 | 294 | 336 | 378 | 420 |
| .366 | 22 | 880 | 44 | 88 | 132 | 176 | 220 | 264 | 308 | 352 | 396 | 440 |
| .383 | 23 | 920 | 46 | 92 | 138 | 184 | 230 | 276 | 322 | 368 | 414 | 460 |
| .40 | 24 | 960 | 48 | 96 | 144 | 192 | 240 | 288 | 336 | 386 | 432 | 480 |
| .416 | 25 | 1000 | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
| .433 | 26 | 1040 | 52 | 104 | 156 | 208 | 260 | 312 | 364 | 416 | 468 | 520 |
| .45 | 27 | 1080 | 54 | 108 | 162 | 216 | 270 | 324 | 378 | 432 | 486 | 540 |
| .466 | 28 | 1120 | 56 | 112 | 168 | 224 | 280 | 336 | 392 | 448 | 504 | 560 |
| .483 | 29 | 1160 | 58 | 116 | 174 | 232 | 290 | 348 | 406 | 464 | 522 | 580 |
| .50 | 30 | 1200 | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |

This table is figured on the basis of an 8 hour day, 300 working days in the year, 2400 working hours

*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 6: When displayed in an office, this table is of value in impressing workers with the importance of saving minutes. It shows the amount of wages that can be saved each year by shortening the required time for performing any task. There is, of course, no saving whatever unless the time saved is employed to advantage on other work.

## MEMO FOR WORK IN PROGRESS SHEET

(Please turn this in with your sheet, on which you have marked off "finished items," at closing time today.)

Date _____

For _____

Item _____

INSERT Today ☐ Every Month, on (date) _____

_____

Every Week, on (day) _____

On (Month) _____ Date _____

FIGURE 7: A form like the one shown here is made out for every job in the office, whether it is out of the regular routine or one that must be done on a special order. The information on this slip is entered on the work sheet shown in Figure 8, where it is always in plain sight of the man in charge, until all the work has been done.

**This plan practically conducts itself**

The work sheet (Figure 8) is made up from a collection of these slips, copied in a convenient form, with the proper items listed under each employee's name. At least one carbon copy is made. The original is kept by the executive responsible for all the work. It bears a list of his own tasks, too. The carbon is cut up, each employee getting his section as a matter of routine.

A stenographer or junior clerk can easily keep up his plan with a small expenditure of time. To get it started, and have all the pending or expected tasks scheduled, requires careful thought. Then the rest is easy.

The slips are collected once, or oftener, each day. Those that are to appear on the next issue of the work sheet (one edition a day is usually ample) are put aside and sorted out by persons; those to go on the sheet at a future time are, as in newspaper work, put into a dated file (which is often preferable to a diary file) and are taken out at the appointed time to be transcribed.

**Keeping up with the schedule**

If a slip is marked "today," it is destroyed after being transcribed. Should it be marked "every month on (date)," or "every week on (day)," it goes back into the date file.

When a task is finished, the person responsible for it crosses out the appropriate item on his section of the work sheet. An item that comes up regularly from time to time will reappear again in season, because a slip remains in the date file.

Should a change in routine demand that a task be shifted to another time, or if it is bound by new conditions, the item is not only crossed off, but the word "kill" is written after it. Then the stenographer, in making out the work sheet, will be signaled to destroy the slip. A new slip, to accord with the new arrangement, is put in the date file.

**A few minutes a day is all the supervision needed**

The executive responsible for office or departmental detail generally supervises the sheet. A few moments at any fixed period of the day suffices. One manager of detail, who uses this system, scans every memorandum slip and every work sheet section before his stenographer takes charge of them, in order to avoid duplication, make corrections and prevent errors in marking off items, or putting them on the sheet.

**How branch offices are handled like departments**

This entire plan has been worked out with good effect. In one office, nearly all communications "at home" or with the branches, are in writing. To make a "hole-proof" system here, where smoothness of opeation is difficult to secure because of the vast amount of detail handled between departments and branches, the sheets for carbons of notes and letters are imprinted according to a special form.

Notes and letters are seldom written without a "subject" heading. This, or a few words underscored in the body of the communication, makes up the memorandum for the work sheet. Branch offices and departments of the home office are treated just the same as an individual in the office, so far as the work sheet is concerned.

Every item on the work sheet must bear the date on which it originated. This date usually is supplied by the dating of the memorandum slips, letters and notes. Items that are getting "stale" are quickly noticed when the sheet is gone over. Very important items are put down in capital letters, but the use of capitals is strictly reserved for the big tasks.

**Nothing is overlooked in this system**

Items that come up regularly are designated accordingly. This merely requires the addition of the signal "MO.-10" for an item which is to show up every month on the tenth, or "W-Wed" for one to appear weekly on Wednesdays, or "Dly," for those that come up every day. These designations are most useful to the executive in charge in keeping the work sheet up to requirements, making necessary changes and avoiding duplications.

Not all tasks will be placed on the work sheet by the executives or employees responsible for them. There are, of course, some steps of so obvious a character, and some tasks of so strictly a routine nature, that no memorandum is necessary. However, it has been found both wise and profitable to adopt a "safety first" rule. It is better to put a seemingly trivial detail on the sheet, than to have an upheaval some day at a critical time because a "little question" has not received attention.

Instructions passed by word of mouth are "memo'd" immediately by those issuing them, and "charged" against those to whom they are given. If an item already

FORM 11 Thursday
WORK SHEET
(Sales Department)

MR. TRAVOR 10/16/17

10/14 - Pan-American Exhibit report tomorrow
10/15 - Railroad tariff change summary
10/15 - Text for new circular B
10/16 - G. B. system matters
Mo.15 - Go over System Magazine; route spl - articles
Dly. - Attend trade papers
W.Wed.- Summary of Business Conditions

MR. CHALMERS 10/16/17

10/16 - Test of new transmission, Beacon Hill
10/16 - A. D. Favor coming today
10/16 - Price list revision
W.Fri.- Payroll closing

TAMPICO BRANCH 10/16/17

10/2 - Report on B. W. Warehouse
10/8 - Consolidated Coal Company, credit; close it
W.Fri.- Close expense sheet and mail

EL PASO BRANCH 10/16/17

10/11 - Reduce office expense by 15th

TRAFFIC DEPARTMENT 10/16/17

Mo.15 - Report on Consignment due
10/15 - Why St. Paul car delayed?

ACCOUNTING DEPARTMENT 10/16/17

W.Fri.- Form 65 Report for M. K.
10/15 - Send B. W. advance fund
10/16 - Why warehouse checking delayed?

**FIGURE 8:** This sheet corresponds to the assignment book in a newspaper office. It remains on the desk of the man in charge and gives him a perspective on the duties which have been assigned to all department heads. The carbon copy of this sheet is cut up and sent to each of the men, thus telling them definitely what their assignments are.

**Work can be shifted from one employee to another**

attended to gets into the next edition of the sheet, no harm is done. It is safe to say that if the unexpected happens and the job is overlooked, the work sheet will not let it remain forgotten too long.

If an employee is reported ill, or has gone away on his vacation, necessary tasks should not go undone simply because he is the only one who knows about them.

This suggests an important feature of the work sheet plan. Work can easily be shifted from one employee to another. And the plan is equally valuable when new employees are taken into a department. They can easily pick up the duties they are to handle. The work sheet, and a few words from an executive, start matters running smoothly in a remarkably short time.

**Desk files help out where there is much routine work**

Before referring again to the special carbon sheet, and showing in detail the use of carbon copies, it seems desirable to explain several other devices that are extremely useful in connection with the work sheet.

In a business house in which this method is used, each home office executive, and some of the branch house managers, are provided with desk files. These are adapted from the sort of dated books of folders that can be purchased at any stationery store. In this concern, special large books have been secured. The tabs ordinarily used for the figures from 1 to 31 have been left blank. There are from 30 to 40 tabs in each book, and they are made of paper from which writing can easily be erased.

Each executive and employee marks the tabs of his book from the top down, as follows, and in ink, for the sake of permanency: "rush," "today—must," "expect today," "urgent," "suspense," "soon," and "any time." Following these tabs, or among them, are inserted other classifications suiting individual conditions. The remaining tabs are for a time left blank.

**Departmentalizing the desk file**

A house-mail system is operated in this office. As the carrier drops papers, notes and letters into the receiving baskets, the men at the desks as soon as possible put the papers into the proper folders of their desk books, picking their places in accordance with the attention required by the matters to which they refer. If preferred, the classifications can be departmentalized further. For instance, "attend today—must," and so on.

This additional classification is desirable when the user of a desk dictates to a stenographer at only stated or fairly regular periods. If the stenographer is close by his desk and can be interrupted to take dictation at any time, or if he uses a dictating machine, it is not so essential to have these more detailed compartments under each variety of classification.

**How the work sheet prevents forgetting**

The remaining tabs in the desk book are reserved for special tasks, or those which are unusually extensive. A pencil notation on one of the erasable tabs will show what subject is contained in each folder. All the papers in connection with each item of this type are, on their receipt, immediately put into the proper folder. A memorandum referring to the task will not let the matter be forgotten, once it is placed on the work sheet.

**An unusual form for carbon copies**

A clip, or some other movable signal, is applied to the desk book tab upon which attention is centered for the moment. Each morning (and also at noon, usually) men having desks start with the "rush" tabs and work down, folder after folder. It is obligatory with them not to leave the office until all "rush" and "today—must" matters have been either finished or in some way provided for satisfactorily.

Care, of course, is exercised in using these classifications, and overtime work need not often be necessary, provided no unusual circumstances interfere and the day's work has been handled with reasonable speed, energy and thoroughness. If the desk is overloaded, the work sheet and desk book will soon show it—likewise, if for any reason the occupant is not equal to the requirements of his position, this fact will soon become apparent to those who should know. That, obviously, is another important point in favor of this plan.

**All carbon copies written on sheets**

The carbon copies of all correspondence in this office are written on sheets (Figure 9.) It might be interesting to run through a few carbons and see how different matters are actually handled. One which requires no further attention, of course, goes at once into the filing-room basket.

Another, perhaps shows that it needs to come up for attention on January 15. The correspondent simply checks "Jan." and "15," and the trick is done. A "ring"

**How the carbon form can help out**

mark is preferable to a checkmark, as the latter goes wrong more easily.

Here is a third carbon. It needs to come up again in three days. The correspondent writes the figure "3" in front of "days." If he finds a carbon which he wants the next day, he "rings" the work "daily."

The initials of certain members of the department also appear on these sheets. A paper comes up, say, which correspondent wants Mr. Calder to see on the day the file delivers it back. He simply "rings" Calder's initials, and marks the proper date.

The same date-book file that is used for work-sheet slips is used for keeping all the carbon copies of unfinished work classified.

The form for carbons, as the illustration (Figure 9) shows, bears in addition a number of symbols, each of which can be used to clear up many kinks in the routine, if properly attended to. Following the initials of individuals there is a blank space for initials that may have to be used only occasionally and can be written in. This also provides for changes in the office staff.

**No "live" papers go to the general file**

Next appears the word "desk." To "ring" this indicates that the paper is to be returned immediately after the other notations on the sheet have received attention. This may be required frequently in the course of a day's correspondence.

"F. U.," if ringed, indicates that the paper goes into the date-book file, or the "follow-up," as it is sometimes termed.

"W. S." stands for work sheet. To ring these letters, therefore, indicates that the paper is to be noted on the work sheet, either for the next edition or at a time that may be indicated by marks among the months and days. In the latter event, the paper may be signaled for return to the desk, for the "follow-up," or even for the general files pending the appearance of the item on the work sheet.

No paper is marked for the general files if it is known that it is to be handled again in the future. Often, however, after the proper notations have been made on the work sheet, the paper is of no further use and can go to the files.

A. F. J., C. D. B., W. S. D., A. L. W., . DESK. F. U. (W. S) (D. B.) , X X . R. B. . SP'L FILE . FILE ROOM.

DAILY. DAYS.

JAN. 1
FEB. 2
MAR. 3
APR. 4
MAY 5
JUNE 6
JULY 7
AUG. 8
SEPT. 9
OCT. 10
NOV. 11
DEC. 12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

St. Louis, Mo.

Sept. 12, 1917.

Mr. James Owen,
356 So. Sears Ave.,
Tampico, Florida.

Dear Mr. Owen

SUBJECT: Consolidated Coal Company Credit.

We were surprised to have the information contained in your letter of the tenth. We don't want so trivial a matter to upset the pleasant business relations of years. There is a large file of papers in this matter on hand now and we request that you adjust it and permit us to close it without additional correspondence.

Yours truly,

BRANNON-WHALEN COMPANY

Morton Wright

FGB/M

Sales Department.

**FIGURE 9:** Above is reproduced one of the special carbon sheets used in one well-organized office to enable a rapid classification of correspondence. The task referred to in this letter, for example, will be recorded on the work sheet (Figure 8) and the letter itself placed in the "D. B." file because "W. S." and "D. B." are circled as you can see.

**Making sure of the right classification**

Nearly any stenographer can gather the main thought of a letter or note from the carbon copy and make the proper notation for the work sheet. Often, however, it is best for the writer himself to underscore a word here and there in the body of the communication. These words then appear under his name on the work sheet at the proper time.

"D. B." on the carbon sheet designates another important phase of the system and stands for "general desk book." This is a file which has folders corresponding in number to the departmental headings on the work sheet, and is the property of all the members of the office, rather than of any particular one, as were the desk books described previously.

"Ringing" the letters "D. B.," therefore, signals that the paper is to go into a folder in the general desk book after other matters noted on the form have had attention. A star is placed after items on the work sheet if the paper concerned is filed at this point in the routine. The reason for this will become apparent further along.

**What should go to the general desk book?**

In an office where many details are always in the process of development, it is usually inadvisable to hold papers, memoranda, letters, and notes on private desks, or even in the individual desk books. These should be reserved for tasks requiring immediate attention.

The "expect today" folder in the individual desk books will hold the few communications that are likely to be answered very soon after they have been written. Most letters are not answered so promptly.

Their place, pending further developments, is in the general desk book. When the answer is received, it requires but a moment to get the previous correspondence from the general desk book, attach it, and place the complete information on the writer's desk. If another department wants correspondence which is in the general desk book, the star on the work sheet, mentioned above, helps in locating.

The marks, "XX," "R. B.," "Sp'l File" and "File Room" on the carbon sheet refer to that phase of a business office which corresponds to the newspaper's "morgue," or collection of data reserved against future demands.

"Slow" papers go to this "XX" file

The "XX" file stands one step beyond the general or individual desk books. Big or long-drawn-out propositions or campaigns that cannot be readily rounded up, or that may require information from a multitude of sources, cannot be conveniently placed in the general desk book, nor in the individual desk book, both of which are for immediate attention. Papers of this slow and bulky sort are therefore placed in the "XX" file until they assume some definite shape.

If several branches and departments are asked for information on an important subject, or are told to perform certain duties in connection with a big campaign, a bulletin is usually sent to each. Replies are expected. The carbons of these communications are marked first for the work sheet, so that every branch or department may be charged with its responsibility for furnishing the facts and figures that are wanted; and, second, for the "XX" file, "Folder No. . . . . ."

Some one person in the department that originated the proposition is responsible for collecting and summarizing the data called for. It may be wise, if the subject is of great importance, to put down a regular work sheet "memo" against the name of this executive or assistant, with a reference "XX—No. . . . . ," preceded by the date on which the task originated and the name of the subject.

When the replies come in, some may ask for more advice. They are answered. The "charge" against these departments or branches is changed on the work sheet to suit these circumstances. Others send in the finished figures or facts. The "charge" against them is removed and the communication goes into the "XX" file.

Why the "XX" file is an important part of the system

When the collection is complete, the work sheet is "clear" except for the charge against the man responsible for the final summary. By using this system, nothing has been overlooked anywhere along the line. And yet no one has been needlessly worried.

For detailed printing jobs, advertising and selling campaigns, and other matters that are full of routine, the "XX" file is especially valuable. Smaller tasks can be handled similarly and quite as easily in the individual desk books.

**A safe place for confidential information**

The "XX" file has a set of stout folders placed in a vertical letter-size cabinet. These folders are numbered from "XX-1" up.

"R. B." (record book) is still another symbol on the carbon sheets. This is an arbitrary name for a binder with ABC guides—or a vertical file similarly classified may be used—into which "live" records that should be close at hand are inserted. Every business it would seem can use a file of this kind. Copies of contracts, sales reports, expense records, and the like, are kept in it to advantage.

**Special files for special uses**

In addition, many concerns require still another file in order properly to care for records, papers, catalogs, and similar reference matter which should not go into the record book because it is bulky or seldom referred to. This file is mentioned on the carbon sheet as the "Sp'l File." The material in it may well be classified by subjects under a library system.

In the sales department of a well-known manufacturer, recent data on sales, selling plans, and the like, are placed in the "record book" file; while information about past campaigns, territories, competitors, and so on, which is more or less general and not so "live," is preserved in the "special file." In this "special file" there are also classifications for inventories of salesmen's trunks; sampling automobiles; records of salesmen, past and present; and a variety of similar data.

**Who should have charge of the work sheet?**

In supervising the work sheet it may seem best to have a single high executive in charge of it for all departments, giving subordinate executives only sheets on which the tasks for their own departments are noted. This executive, then, must scan all of the work sheets frequently to see that outside departments and branches do their share promptly. In a large organization this is usually desirable, especially if some of the executives in the branches like to take instructions only from those in authority.

When the type of work sheet described at the beginning of this chapter is used, it can be arranged to send out regularly to the departments and the branches those portions of the work sheet that apply to each of them. This saves a large amount of follow-up correspondence;

for the work sheet will be as serviceable as a letter in securing attention for unfinished items. And there is not the risk, as there certainly is in hastily dictated letters, that the follow-up may appear "nagging" to the other man.

**Here's an efficient plan for use in conferences**

When this system of work sheets, desk books, and special files is properly used, all routine matters are instantly and completely available to each department head for reference in the event of a conference with the head of another department or a branch executive.

To remove an item from the work sheet, after it is finished or ready to be disposed of for the time being, it is only necessary to cross it off. If the "memo" is to come up periodically, it will show up in the file promptly at the appointed time.

**Special signs for special problems**

If it becomes necessary to remove such an item permanently, the word "kill" can be used to indicate that need. If an asterisk (*) appears after the item, or any other signal indicating that there is material on the subject in the local files, the stenographer removes this material and sends it to the general files. As a precaution, it is often wise to have this material placed on the desk of the responsible executive for a final glance.

If an employee is told to put a proposition charged to him up to some other department, branch or worker, the charge against him should be crossed off, and a new one made against the person assuming the responsibility, except in cases where the item is so important that it should stand charged to both. The "editor" of the work sheet will readily notice any mistakes or misunderstandings arising in the course of the procedure.

This system has been in successful operation for several years and its originator says about it:

**This plan cut overtime work for one man**

"Formerly there was a time, during those extremely busy periods which come now and then, and before this system was installed, when I found I had to take home a lot of work in the evening just to see what was going on. Sometimes, too, I spent hours in the office after the others had gone home. Now I can put the work sheet covering the part of the business for which I am responsible into my pocket and go over it any time. It is possible for me to line up the situation in a few moments."

## CHAPTER III

# BETTER RETURNS FROM THE OFFICE PAYROLL

**This problem is present in all offices—large or small**

MUCH valuable time that might be saved often goes needlessly to waste, in even the small office. If lost through tardiness, inaccuracy, or wrong working methods, strict discipline and instruction may plug the leak.

Physical or mental fatigue, lack of interest, and the like, can often be overcome by instituting periodic exercise, improving ventilation, and giving rewards for excellent performance of work. Too many men are inclined to feel that their offices are too small to benefit from methods used in larger ones, not realizing that the office employee is mentally and physically much the same, whether working alone or as one among hundreds.

It is true that work is not so likely to be monotonous in smaller offices as in offices where the employee may, perhaps, spend the entire day at one task. But in small offices where the proprietor is often the office manager, supervision may be less strict and methods more lax. It is in these offices that the plans adopted in large offices, after scientific investigation, may prove valuable.

**What influences affect office workers?**

A desire to regulate or eliminate the annoying details that decrease office effectiveness—stenographers sharpening pencils which office boys might keep in order, and the like—caused the introduction of many unusual methods in a middle western office. The result has been an efficient, smooth-running business machine.

The following facts have been clearly demonstrated:

1. Workers—especially girls—respond to the inspiration of mottoes.

2. Flowers on the desk of an employee not only improve the worker's frame of mind, but actually increase output.

3. Music is not out of place in an office—an occasional concert, even during work hours, adds to the mental nimbleness of the workers.

4. Exercise periods are invaluable in keeping the workers up to standard, physically, and in dissipating fatigue.

5. Fresh air is absolutely essential to good work.

6. Rewards, such as medals and credits, cause a friendly rivalry and make for better morale and increased interest.

7. Conferences to which workers are invited develop the helpful spirit of cooperation.

8. An organization which hooks up the social life of the employee with the work of the office is valuable in increasing interest.

**Office mottoes that have a real value**

Let us take up these points in order, and see how the methods suggested are applied in this particular office. First of all, mottoes:

A small blackboard in plain view of all who enter the office is used to bring a daily message to each worker. It has been found a good plan to have a general weekly slogan. This is always brief and emphasizes a quality which seems necessary in the office at the time. Thus "No Mistakes," "Soft Pedal," "On Time," and "All Together" have been used with appreciable results.

It has been found possible in this way to give a definite trend to the thought of the entire office force. "Never Late" cut down tardiness eighteen per cent in a week. "Be Friendly" had the effect of breaking up an office feud that had hindered office routine for many weeks.

Besides the weekly motto, a daily motto is also used. It is the first thing to greet the workers when they come in. Workers come to look for the day's motto each morning; and the effect, while intangible, is helpful.

**Why flowers have a place in an office**

The second point mentioned is the efficacy of flowers in business. It is common knowledge that hospital patients will often respond to the suggestion of flowers placed in their rooms. The office manager simply borrowed this idea, gave it a trial, and found that it worked admirably in promoting efficiency.

Flowers placed on the desk—especially in the winter—will often put the office worker in a more productive frame of mind. The difference in office efficiency on days when the flowers are present, over days when they are not, can at times be detected. It is much the same as the difference in productivity shown on bleak, rainy days and days when fresh air and sunshine help dissipate fatigue.

**How music affects office workers**

Music was the third influence mentioned. It comes in the came category as flowers. Women are apt to respond to music in greater degree—so far as their attitude toward their work goes—than men; music therefore is usually most effective in offices where many girls are employed.

In this office the manager uses an inexpensive phonograph. It was purchased as an experiment in efficiency, and the idea has been clearly demonstrated as practicable. Of course, the machine is not kept going during business hours. It is used chiefly at noon and immediately before the day's work; but sometimes, when a sudden rush of work has tensed the entire organization and errors due to high speed are becoming apparent, a soothing violin solo, or an old fashioned melody, will relieve the tension and get work back on a normal basis.

**Breaking up monotony with exercise periods**

Exercise among the office workers is not an innovation. Managers realize that it is better to lose half an hour than suffer a twenty-five per cent reduction in the productivity for four hours. The value of exercise periods for sedentary workers is unquestioned. It is always possible to have breathing, setting-up, or dumb-bell exercises without the bells. Manuals of exercise may be obtained for a trifle.

Exercise periods are not long in this office—never more than fifteen minutes, and seldom more than ten. The most convenient hours for exercise have been found to be ten o'clock in the morning and three o'clock in the afternoon.

Fresh air and exercise go hand in hand. They are better taken together—but considered singly, each affords incalculable benefit to the indoor worker. It is not always possible to institute a system of exercise, but fresh air is free. The office in question has established an open window drill as part of its regular routine. In summer the enforcement of the drill is scarcely necessary, because windows are usually open anyway.

**Here is an effective worker stimulant**

The sixth point mentioned is the value of rewards.

A gold medal is awarded every month to the worker with the highest efficiency, a silver medal for the best attendance and punctuality record; and a bronze medal for the best office suggestion.

## NOTICE OF ABSENCE OR FAILURE TO REGISTER

MR. _____ DEPT. NO. _____

RETURN TO DEPT. NO. _____ DATE _____

On the above date employees failed to register or were absent as indicated by check marks. If failure to register, give time IN or OUT in column checked. If absent, state reason for absence, and indicate by a check whether at OWN EXPENSE, COMPANY BUSINESS, EXCUSED, or NOT EXCUSED. Sign this sheet and return to payroll department immediately. Irregularities will be left unadjusted on payroll until this sheet is returned properly signed.

| Clock Number | Name | A. M. | | P. M. | | Night | | Absent | | Remarks | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | In | Out | In | Out | | | A. M. | P. M. | Sick | At Own Expense | Company Business | Excused | Not Excused |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |

FIGURE 10: Here is an effective check on tardiness and absence. The payroll department fills out the left side of this sheet from the records of the time clock. It is "up" to the department head to fill in an explanation under "Remarks" and return the form to the payroll department. Until this is done irregularities on the payroll are not adjusted.

## LATE LIST

_____ 191 _____

M _____

Below is a list of the time of arrival of employees in your department:

| NAME | A. M. | P. M. |
|---|---|---|
| | | |
| | | |
| | | |

**How "get-togethers" smooth out difficulties**

The value of conferences is the seventh point mentioned as helping to make the office efficient. All workers gather in a large assembly room once a week. Questions are asked and answered. Everyone is given an opportunity for frank expression of opinions. Knots of tangled routine are straightened and a more sincere cooperation is instituted.

A club has been organized which meets for a half hour each week. Sometimes the meetings are intended to be merely diverting. At other sessions, office routine is discussed. Sometimes an outside speaker addresses the workers. The meetings are always interesting and all attend, on office time. Employees are encouraged to make suggestions. Every one that promises results in better office work is given a thorough trial. If a suggestion proves worthless, it is discarded; if successful, it is gone into heartily. The result of the entire program has been an unusually effective office force.

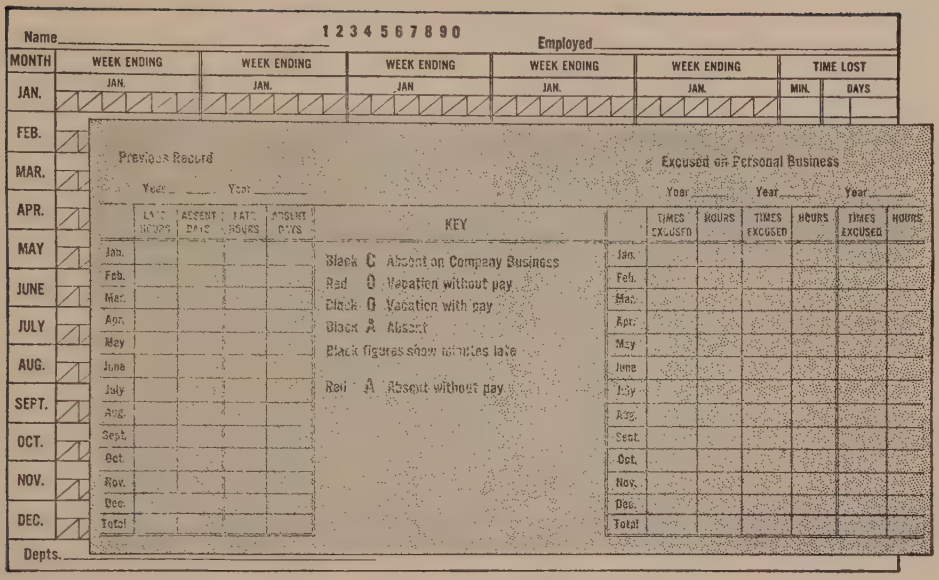
**Clerical errors often mean heavy loss**

Every thoughtful manager realizes how much good will his concern may lose through the always irritating and often unnecessary mistakes which his employees make, but not all know how much direct money loss these mistakes cause. Errors must be corrected. This takes time; and, even worse, when the error causes delay or dissatisfaction to the customer, lost business may result. Few offices have a well-defined policy for reducing clerical mistakes. A reprimand for the offending clerk is the usual method, but while this may make him more careful for a while, usually the good effect soon wears off.

One office manager made an investigation of the kinds and frequency of mistakes and the loss occasioned by them. From the information gained he devised a system which has been effective in getting better work in his office. The principles would seem to be as applicable to the office force consisting only of a bookkeeper and stenographer as they are to the large office where they now give such good results.

**Errors caused 200 complaints a month in one office**

This man's investigation brought out some astonishing facts. For instance, he found that among 2,500 employees an average of 12,000 errors were being made every month. The result from the point of view of customers was a daily grist of 200 complaints.



Name_____ 1 2 3 4 5 6 7 8 9 0 Employed_____

| MONTH | WEEK ENDING | WEEK ENDING | WEEK ENDING | WEEK ENDING | WEEK ENDING | TIME LOST | |
|---|---|---|---|---|---|---|---|
| JAN. | JAN. | JAN. | JAN | JAN. | JAN. | MIN. | DAYS |
| FEB. | | | | | | | |
| MAR. | | | | | | | |
| APR. | | | | | | | |
| MAY | | | | | | | |
| JUNE | | | | | | | |
| JULY | | | | | | | |
| AUG. | | | | | | | |
| SEPT. | | | | | | | |
| OCT. | | | | | | | |
| NOV. | | | | | | | |
| DEC. | | | | | | | |

Depts._____

Previous Record

Year_____ Year_____

| | LATE HOURS | ABSENT DAYS | LATE HOURS | ABSENT DAYS |
|---|---|---|---|---|
| Jan. | | | | |
| Feb. | | | | |
| Mar. | | | | |
| Apr. | | | | |
| May | | | | |
| June | | | | |
| July | | | | |
| Aug. | | | | |
| Sept. | | | | |
| Oct. | | | | |
| Nov. | | | | |
| Dec. | | | | |
| Total | | | | |

KEY

Black C Absent on Company Business
Red O Vacation without pay
Black O Vacation with pay
Black A Absent
Black figures show minutes late
Red A Absent without pay

Excused on Personal Business

Year_____ Year_____ Year_____

| | TIMES EXCUSED | HOURS | TIMES EXCUSED | HOURS | TIMES EXCUSED | HOURS |
|---|---|---|---|---|---|---|
| Jan. | | | | | | |
| Feb. | | | | | | |
| Mar. | | | | | | |
| Apr. | | | | | | |
| May | | | | | | |
| June | | | | | | |
| July | | | | | | |
| Aug. | | | | | | |
| Sept. | | | | | | |
| Oct. | | | | | | |
| Nov. | | | | | | |
| Dec. | | | | | | |
| Total | | | | | | |

FIGURE 12: A complete record of an employee's time for one year is kept on this card, both sides of which are shown in this illustration. Such a record gives an excellent basis for promotions because it gives a bird's-eye view of his faithfulness. There is also a space to show what departments the employee has worked in and how long.

## BLUNDER SLIP

Clerk No. 33 Check No. 17643 Date 12/27/16

You omitted Number of pieces

INSPECTOR'S NUMBER 171

Kindly see that this error does not occur again
N. B.—Errors count against advancement

H. C. CAPWELL CO.

Supt. W. C. F.

I acknowledge making above error
Read, sign and return to office

Employee's Sig. A. M. Harwell

FIGURE 13: An inspector looks over all orders, invoices, and other clerical work, to see that no errors get to the customers' notice. When he finds an error he calls it to the employee's attention on this form. The worker who made the error signs this blunder slip and returns it to the office, where it then becomes a matter of record.

**Listing the clerical errors accurately**

The errors were of every conceivable kind, from the illegible writing of the salesgirl to an overcharge by a bookkeeper. The list included about 375 kinds, all told.

Every one of these errors caused delay, trouble and dissatisfaction, somewhere down the line. Someone had to spend the company's time making the correction, and very often some customer conceived a poor opinion of the firm's methods. The problem, therefore, was how to approximate the ideal—an errorless force of employees which would remain errorless.

It was seldom possible to eliminate all errors, but it seemed that in many cases the mistakes were merely due to neglect or carelessness, and that they would not have happened had the employee definitely kept in mind a goal of accuracy. To furnish such a goal, a system was established which has now been in successful operation for several years.

"First of all I listed, by departments, the errors that a six month's study told us were made in those departments," says this manager. "The various errors were classified, and each error was given a number. Then we had printed lists made, one for each department.

**How the manager may discover the accurate workers**

"There is space to indicate the date, the number of the employee at fault, and along the left side, a column in which we place a checkmark against the particular error which the employee had made. The one at fault is required to sign the slip, thus acknowledging the mistake and assuring an accurate record.

"When the employee's error is called to his attention in this way, he is likely to be strictly on his guard against slipping up in the same way again.

"In the office," the manager continues, "we keep a careful record of these error slips. For each employee we have a separate envelop. The slips charged against employees are filed in these envelops and a checkmark for each error appears on the face.

**Offering an incentive for perfect work**

"Merely keeping these records would probably help us but little, but we supplement them by offering an incentive to employees to secure errorless records.

"Each month those who have been so careful in their work that they have not had a single error checked against them, receive what we call an 'honor card.'

"This states that the employee has been most proficient in his work, and is therefore entitled to a half day's vacation at our expense. The employee can present this card at the timekeeper's office and arrange to take his holiday at any time within the following two months which suits his pleasure and does not discommode his department to any unfair extent.

**Impressing the company policy on employees**

"This provides a very real incentive. When we installed the plan, many employees were opposed to it. But today they are heartily in favor of it, and if they fail to receive an honor card when they think they deserve one, they request those in charge to investigate.

"Employees who have a record of no errors for 12 months are entitled to an extra full day off—with pay, of course—and almost always such an employee is in line for an increase in salary.

**What causes errors?**

"Each month we make a list of the 100 workers who have the largest number of errors posted against them. These employees are called into conference, and our policy in regard to errors is firmly impressed on their minds. Anyone who is in this class month after month is in serious danger of discharge.

"One point of special interest is that tardiness is counted an error. Formerly about 150 people came late every morning. Now we seldom have more than 50.

"One girl takes care of all the records connected with this system, so it is inexpensive to operate. The benefits, however, are evident from the figures I have given above to show decrease in errors and complaints."

**What the manager of a small office says**

The manager of a smaller office says: "Our employees determine for themselves, by the quality of their work, whether or not they can remain in our employ. They also judge themselves for promotions. The methods by which we accomplish these results will doubtless be of interest to all employers.

"Our general policy in regard to errors has been to commend those who are exceptionally careful, and to tell the others their faults and explain how to overcome them. Carelessness and lack of knowledge are the usual causes of mistakes. We do not believe in discharging our employees on slight provocation, but we explain to them that continued errors lead to dismissal.

**One plan that reduced tardiness**

Many plans are in use which cut down time lost through tardiness and absence. One manufacturer has adopted an interesting plan for his office force. Every employee who is neither absent nor tardy during any month receives a small addition to his wages for that month. Also, the employee gets his pay envelop direct from the paymaster. But the envelops of employees who have been tardy or absent are delivered personally at a special interview with the manager. These employees must be able to explain delinquencies.

Of course, sickness, injuries, jury duty, and so on, are considered sufficient reasons for absences, but ordinary excuses "don't go." The manufacturer has few pay envelops to deliver himself. Inexcusable tardiness and absences have been almost entirely eliminated.

Getting the six employees of his office in on time was formerly a difficult problem for a Milwaukee business man. The employees were severely "docked" for every offense, but this penalty seemed to have no effect in reducing the number of stragglers who appeared morning after morning anywhere from 10 to 20 minutes after starting time.

**Using "public opinion" to get employees in on time**

Finally, he decided to make public opinion a factor in his fight, and put in operation a simple plan that, with minor changes, may well serve the same purpose in any office with more than one employee. He arbitrarily set three as the limit of excusable tardiness that would be allowed in the whole office in one week.

So long as the total for the week was below this figure, only the usual small sum was deducted from the salary of each "late."

When, however, the number of offenses for any week ran above three, then every person who was late the following week was "docked" four times this nominal rate. If, for example, a stenographer was 10 minutes late and the usual rate for such a tardiness was 10 cents, that amount would be deducted from her salary provided there had not been more than 3 offenses of a like nature the previous week. If, however, the number of tardinesses for the previous week had been greater than the stipulated number, then 40 cents would be taken from her salary for the offense.

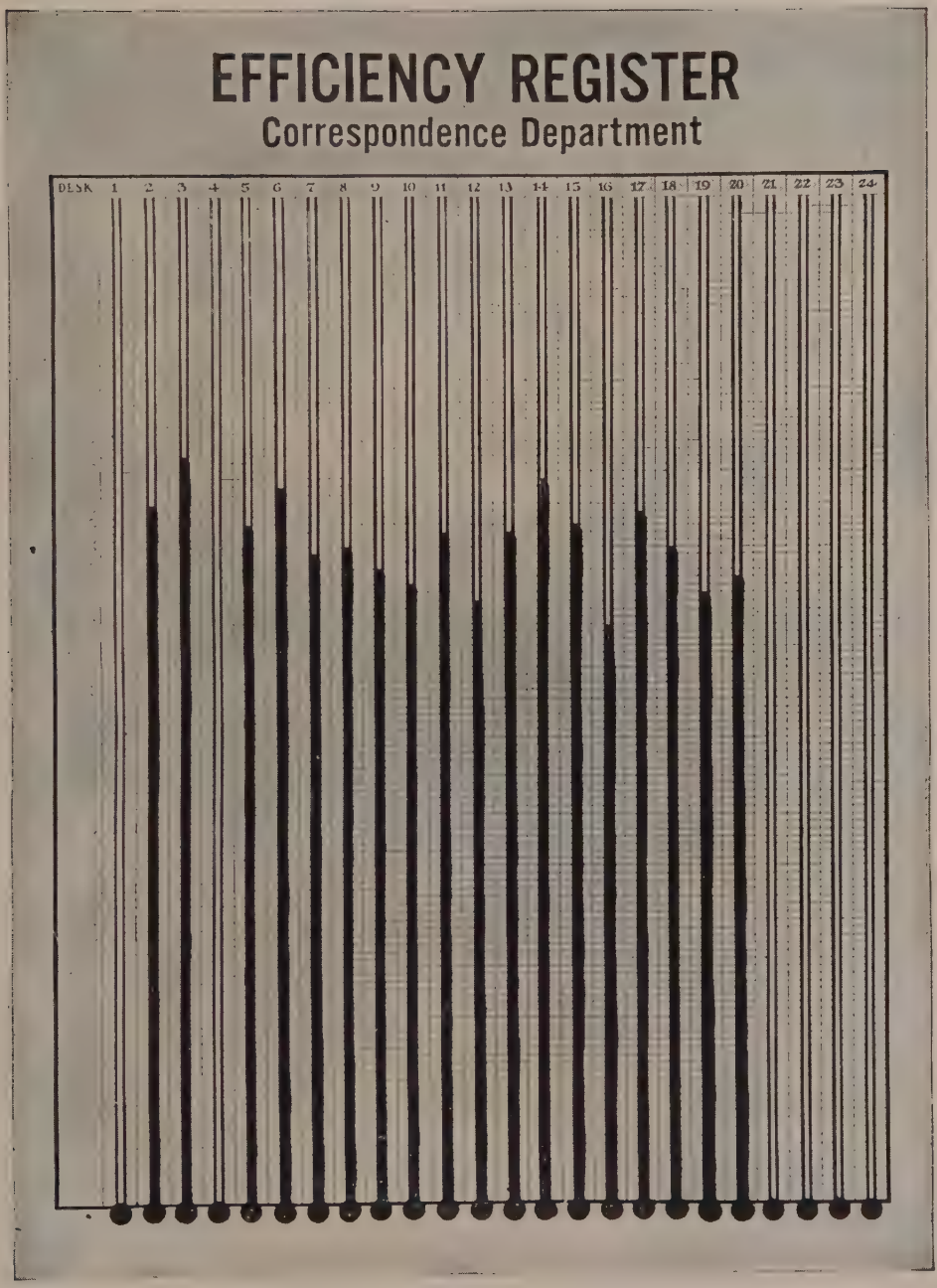



**FIGURE 14:** This is the "bulletin board" one office manager uses to stir up the spirit of competition among the workers. Each of the thermometers shows the effectiveness of one correspondent. The height of the "mercury" in the tube is determined by the speed and quality of the work turned out. The office manager has found it very effective.

Date 12-28-16

**MORNING LATE SLIP**

No. 72

Name W.A. Mishalie

No. of Minutes Late 8

Signed W.A. Mishalie

EXCUSE Cars jammed

Accepted _____ Supt.

Not Accepted H.F.B Supt.

Date 12-26-16

**LATE SLIP**

No. 43

Name A.C. Farber

No. of Minutes Late 7

Signed A.C. Farber

EXCUSE None

Accepted _____ Supt.

Not Accepted H.F.B. Supt.

**PURCHASING TICKET**

NO. 79 DEPT. 3

LEFT 3.30 RETURNED 4.10

| CLERK | CHECK | AMOUNT |
|---|---|---|
| 63 | 121 | 1.04 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

DATE 12/29/16

ISSUED _____

FIGURE 15: One manager finds that when excuses for tardiness must be written out, the "lates" decrease in number. Perhaps this is because the usual excuses look pretty flimsy when put on paper. If your employees are given to making personal purchases on company time, a form like that on the right may keep that loss of time to a minimum.

| % | Personal Record | |
|---|---|---|
| 15 | Health | .14 |
| 11 | Personality | .10 |
| 7 | Knowledge of Stock | .06 |
| 7 | Care of Stock | .05 |
| 40 | Total Rating | .35 |

| | Sales Record | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Returns | .10 | | | | | | | | | | | |
| 20 | Net Sales | .20 | | | | | | | | | | | |
| 5 | Rank in Dept. | .017 | | | | | | | | | | | |
| 5 | Selling Cost | .017 | | | | | | | | | | | |
| 40 | Total Rating | .334 | | | | | | | | | | | |

| | Accuracy Record | |
|---|---|---|
| 11 | Errors | .09 |
| 5 | Rank in Dept. | .033 |
| 2 | Times Late | .02 |
| 2 | Times Absent | .02 |
| 20 | Total Rating | .163 |
| 100 | Complete Rating | .847 |
| | Class | 3 |

Name _____ No. _____

| | Times Late | | Lunch Time | | Blun- | Cus. | Del. | Passes | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A. M. | P. M. | Lost | Gained | dered | Com. | Com. | No. | Time | Amt. |
| Jan. | | | | | | | | | | |
| Feb. | | | | | | | | | | |
| Mar. | | | | | | | | | | |
| Apr. | | | | | | | | | | |
| May | | | | | | | | | | |
| June | | | | | | | | | | |
| July | | | | | | | | | | |
| Aug. | | | | | | | | | | |
| Sept. | | | | | | | | | | |
| Oct. | | | | | | | | | | |
| Nov. | | | | | | | | | | |
| Dec. | | | | | | | | | | |
| Total | | | | | | | | | | |

FIGURE 16: This time record serves many purposes. It is, in fact, a mighty complete record of the employee's value as a worker. When raises are under discussion it is very handy to have all the information which bears on the subject on so simple a card as this. The raise problem usually is a hard one; perhaps this can help you solve yours.

**How tardiness was reduced 90% in one office**

This plan makes it to everybody's interest to be at work on time. Further, it gets everyone interested in seeing that all are in on time; for no worker knows when some unavoidable incident may delay him, and the man who regularly comes on time does not like to feel that through the carelessness of others in the office he may suffer unduly. The criticism of all the force, therefore, is directed at the "lates," and rather than incur this criticism everyone tries to be prompt. The plan has reduced the number of "lates" by 90%.

An eastern manufacturer effectively checks the working time of his 500 office employees by means of a simple and thoroughly practical system.

**The "honor" system is effective sometimes**

After making due allowance for sickness or other unavoidable causes, the company knows at any time what employees are faithful and entitled to full vacations. And it also discovers the ones who are inclined to be less prompt and who shirk their duties.

The office force, moreover, is put solely on its honor in keeping regular hours. Each employee is made to feel that so long as he is conscientious about his time, which the company buys, he will never be asked to explain an occasional tardiness or absence.

To secure definite information about lost time, the door man keeps strict tab on employees coming to work late; and he requires that all who leave for any cause, during office hours, make a record of the fact. He has a simple form on which he enters the name of the employee, and time "in" or "out" as the case may be.

No employee is "docked" for being late, but if a number of offenses are marked up against him during one month, he is called before the office manager to explain.

**A tardy report for department heads**

The second time this course is necessary he is called down hard, and it may be regarded as a sufficient cause for discharge. But the company is liberal in construing explanations and is inclined to encourage rather than reprimand. It merely wants every employee to render the full time service for which he is being paid.

In order to show the heads of departments which of their employees have been late, a report (Figure 10)

**Keeping tab on the men**

shown on page 29 is made out daily in the office of the manager. This is a list giving the name and the amount of time lost. It is intended as a guide to department managers in handling the "lates," for often words of caution and advice may save them later from the humiliation of reprimands. It is a strong link in the system of discipline.

An account of absentees is kept on a simple slip shown in Figure 11 on page 29, which is made out twice daily by the chief clerk or head of each department. He fills in the date and department at the top, and the names of those not on duty, together with the reason for each absence, if known. This report he signs and sends to the paymaster's office at 8:30 in the morning, and at 1:30 in the afternoon.

To record the time of those who leave during office hours, an employee's pass (Figure 11, shown on page 29) is used. This slip is printed in two sections, "out" and "in," and is perforated in the center. Each part bears the distinguishing number. The pass is obtained from the head of the department, who signs it to show that the employee has authority for leaving. The name, time, and date are then entered in the "out" section, and the reason—either company service, personal business, or sickness—is indicated below. This part is then torn off and deposited in a box at the main door. The "In" section of the pass is retained by the employee. If he returns during the day he enters the time and department on the proper lines, and puts the slip in the box as soon as he enters.

**A card that checks up on efficiency**

By this simple yet effective plan any irregularity of careless employees is quickly shown up, and wilful violation of established rules is easily detected. As an incentive to promptness, all who have not been absent for any personal cause and have not been late an unusual number of times, are given extra vacation with pay.

Definite records of the relative efficiency of employees may be obtained from a card file. Each card (Figure 12, shown on page 31) provides a complete time history of one employee for an entire year, registered by days. The name of the employee and the date of employment are typed at the top, and at the bottom are spaces for

FIGURE 17: Usually concerts are confined to lunch hours, but sometimes when a rush of work comes on, especially late in the day, a violin selection is found effective in one office in soothing disordered nerves. The decrease in errors after an interlude of music is noticeable. The investment is often found to be negligible as compared to the results.

FIGURE 18: Sometimes it is well to give sedentary workers a recess, so that they can get the stimulation of fresh air. If you don't happen to have a roof like this where they can promenade for 10 minutes or so, you might try calisthenics right in the office with the windows open wide. This plan is becoming more and more popular with managers.

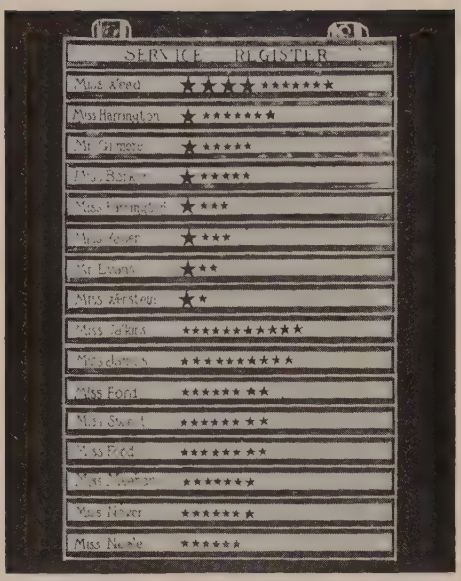



FIGURE 19: The workers in one office get a small star for every month they stay and a large one for every year. The originator firmly believes it has cut the labor turnover.

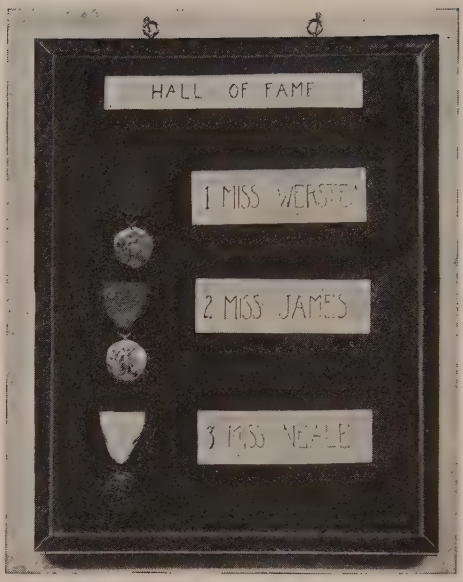



FIGURE 20: Medals are awarded monthly in one office. In this month Miss Werstein was most efficient, Miss James the most punctual. Miss Neale made the best office suggestion.

FIGURE 21: In this same office, attention is paid to making the work as easy as possible for the workers. For instance, as shown here, adding machines are sunk into the table tops so that they can be manipulated with a minimum of muscular exertion and consequent fatigue. Time studies have proved this plan effective in many cases.

the names of departments in which he has worked, the date employment ended, and the number of days' vacation to which his record entitles him.

**A record on which to base promotions**

Keeping this record is a very simple matter. Entries are made daily and, since the delinquents are comparatively few, the work takes but little time. Only those who are late or absent are noticed at all. The cards of "lates" are marked by merely putting in the number of minutes late in the lower triangular space for the day, while the cards of those absent have entries made in the upper space by the use of symbols.

On the reverse of this card a comparative record by years is kept for the year. The previous record is entered in the left-hand section by months, showing the number of hours late and days absent to afford a comparison for two years. In the right-hand section is entered the record of "excused on personal business" for three years. At the bottom of each section the total is carried for the yearly summary, and forms a most comprehensive showing of time efficiency.

**This office does not recognize the necessity for overtime work**

A few employees criticised this system at first because it does not provide a record of occasional overtime. While no one expects additional pay for office overtime, it would be some satisfaction, they contended, to be sure that executives, and particularly the paymaster, knew in a regular way of such extra time. The company, however, does not recognize overtime as existing in the office. Its broad policy is to employ a force sufficient at all times to take care of the work. Overtime is not looked upon with favor. The actual record of lost time, however, is invaluable to the office manager in estimating the relative faithfulness of employees.

Accuracy and attendance are usually considered in determining promotion, but the question of an employee's ability is too often left to the general impression which he has made. One office manager realized that sometimes an unimpressive personality might cover up real ability and to avoid injustice keeps a little book which he calls "Why They Were Better."

When he finds an employee doing something in a better way, or when a man develops some keener appreciation of the demands of modern business, this manager makes a

**A record of accomplishment**

mental note of it and later writes it down in his book.

A number of extracts from "Why They Were Better" appear below:

Mr. Pascall:

This man received ten dollars per week as a clerk. Unimportant job. But suggested that a two-page newspaper, printed once a week for the two hundred men in the office would increase general effectiveness.

Asked to have opportunity as editor. Some literary ability and much natural talent. Was granted trifling initial expense to try it out. Half size of regulation newspaper. One fold only. Purely departmental. General news of office and its work, ball games, small talk, and the like.

Immense hit. Somewhat disjointed at first, but steadily improved. Men eagerly sought it. Inspirational items for common good introduced in mild doses.

The good of the little sheet unquestioned. Cost a little under $25 per issue. Was soon in demand all over the organization.

---

Mr. Agnew:

**How suggestions helped one man to accomplish more**

Started with us as stenographer. Suggested that he be given a new job as competition investigator. Worked from eight-thirty to five-thirty each day of week studying our competitors.

Just plain, clean, legitimate investigative research. Visited competitors' plants, interviewed their customers, followed results of their advertising, kept pace with their new methods, stunts, novelties, and form letter schedules. All open and aboveboard.

Every morning he dictated results of previous day's investigation. Typewritten resume was placed on desk of every man who could profit by studying and reading it.

Gave us a better estimate of our competition than ever we had before. Invaluable. Inspiration for new ideas of our own. Reports filed, bound in sets of 25. Ready reference.

Mr. Lohse:

**This clerk helped cut the work of salesmen**

Kept what he termed a telephone, for the salesmen. One desk was given over to neatly tabulated cards bearing names, telephone numbers, and similar facts regarding all local or suburban clients and prospects. Before starting out mornings, this file was quickly referred to. Telephone was then used to arrange for calls, interviews, and questions.

It had been customary for men to call in person. Sometimes prospects were out. Then, again, they would be busy or disinclined to talk. A half hour devoted to the telephone file minimized useless walking and talking. The day's work could be planned in advance. Elimination of foolish and unnecessary effort.

In an office where there are only a few employees, it is easy for the proprietor to know pretty accurately just what each is doing, but when the number gets up to a dozen or more, some such system as this assures a just basis for promotion.

## CHAPTER IV

# SELECTING THE RIGHT OFFICE WORKERS

**Why standards of employment are important**

WHAT does an office boy know? What work can he be trained to do in the organization? What responsibilities can successfully be placed on the shoulders of stenographers, filing clerks, and office employees of like status?

These are questions that are important to every employer of office help. While the payroll in the large office may be larger, the loss from hiring inefficient workers may well be felt most keenly in the office where only two or three clerks are employed.

The manager of an eastern mail-order house of medium size wanted to raise the standard of the work done in his office. He felt that if he had a definite basis to work on, it would be simple enough to map out ways and means for improvement. So he studied these questions and, as a result, planned a series of written examinations—tests that would reveal the ability of employees to perform common operations in a business office. He arranged the examinations in four general grades, with variations to fit the requirements of different departments.

**Some simple tests for office boys**

First of all, he wanted to know the average degree of intelligence of boys coming directly from school. His point of view was that an office boy, to be worth anything, ought to be capable of promotion. He believed that an office boy would probably be of little use unless he had at least a full grammar school education, and possessed a mind that was both active and persistent.

So he uses a little attention test—very simple—to see whether a boy's eye is quick enough to catch, in two minutes, every 2 and 3 in a column of 150 figures. A memory test shows whether the boy can apply himself for five minutes to fixing in mind the things he is told to do—in this case studying a page of house rules.

Finally, he tests the boy's fundamental education in spelling, arithmetic, and punctuation—indispensable factors if later he is promoted to a more responsible position.

**This man wants his employees to have practical knowledge**

When testing the filing clerks, the manager gives them 15 letters and 50 orders. He tells them to pick from the bunch of orders those which are called for in the letters—and they are expected to do it, without an error, in a fair average length of time.

He requires a stenographer, among other things, to copy a letter accurately. The letter chosen for the test is full of blanks and indentions.

The manager also gives practical tests in grammar. He does not try to find out whether the stenographer can define this or analyze that, but he does want to see if she knows when to write "principal" and when to write "principle," whether she says: "It don't look right to me," or "It doesn't look right to me," and so on. He tests her spelling too, to see whether she will spell "separate" with an "e" or "sensible" with an "a." Finally, he wants to know what speed she can make.

**A plan that has raised standards greatly in two years**

When the manager found that most all the applicants were deficient on this point or that, he established a school of his own to supplement the work of the public schools. By means of specific training he cured the defects, and also gave special training for handling certain phases of his own work.

In two years he has materially raised the entire standard of his office work. He has high school graduates where before he had grammar school graduates, and he has "first-raters" where before he had "average mediums." He is convinced it pays, and he is developing these tests and the supplementary training on a larger scale than ever before. One direct result has been a decrease in the rate of his labor turnover.

It is a simple matter to test the speed and accuracy of an applicant for a position as stenographer by dictating a letter to her and asking her to get it out on a standard time basis. Many employment managers have been doing this for years.

But often the business man does not have a standard letter at hand. He does not know how fast the stenog-

**The absence of fixed standards often encourages ineffective work**

rapher ought to transcribe it, and so he falls back on guessing at her worth and finding out by experience; that is, he pays two or three weeks' salary to see how she does. Then after she gets accustomed to his ways he hates to change, and is by no means sure he will get a better one if he does change.

Some office forces have a high average of ability, and some have a low average. The trouble is, chiefly, that employers have no standards which enable them definitely to know how their forces compare with others. If a manager has an inferior force, he is likely to think everybody else has an inferior force, too.

**Setting standards for certain tasks**

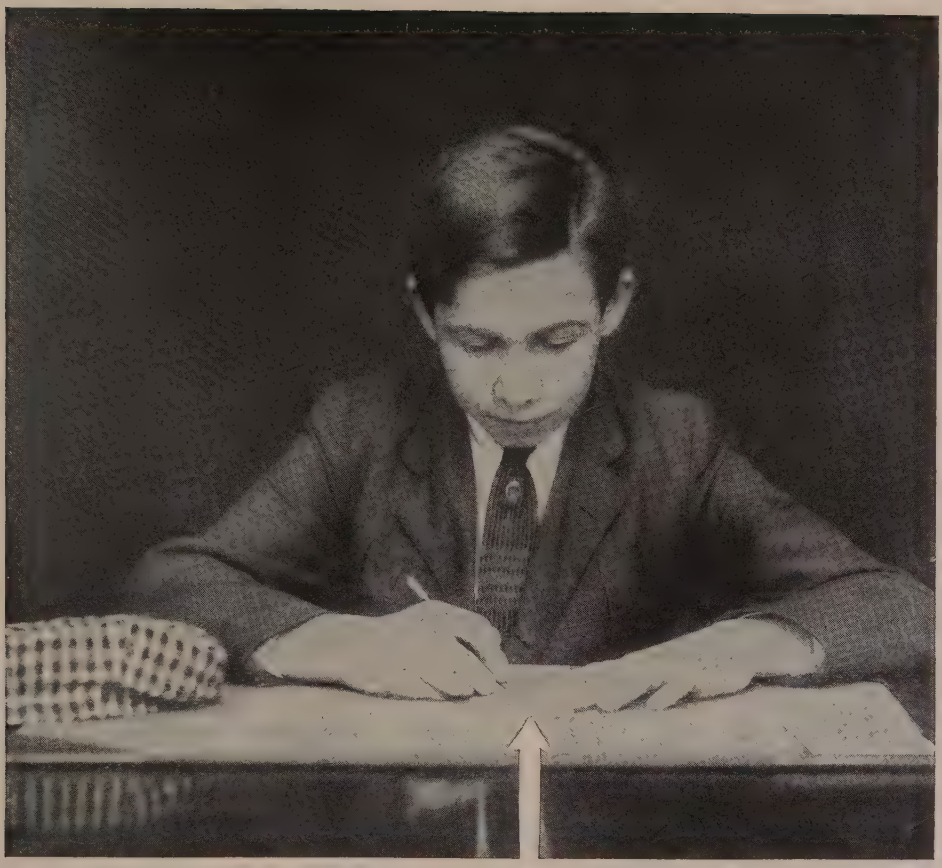
The first important step in establishing standards is to have a reliable and really scientific means of measuring and judging ability in office work. School examinations, ordinarily, have certain defects which unfit them for use in business offices. As a rule, the questions are academic, and of little business value.

The business man does not care about the explanation, usually, so long as the applicant can do the work. For example, in the average business office a stenographer ought to be able to decide whether to write "He didn't do it yet." If the right form is chosen the grammatical explanation usually makes no difference.

But even after you have secured real tests of ability, scientifically accurate, and graded on a mechanical plan that always gives the same rankings, no matter how many different persons grade the papers, the business man cannot tell what the grading indicates unless he compares it with something he already knows—as, for example, the averages made by representative groups of employees in high-class business houses scattered over the country, in taking precisely similar examinations.

**The test used one office**

Some data of this sort is becoming available from experiments made by a number of concerns. One of the first trials given in one office was a test on spelling. A young woman who was studying nights to become a dictaphone operator, made an average of 59%. It was instantly apparent that she could never succeed in writing letters from the dictaphone, unless she first learned to spell. Both she and the company were wasting time on the wrong thing.



**AN ATTENTION TEST**

Cross the 2's and ring the 3's among the figures given below; the time allowed is two minutes

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 3 | 4 | 5 | 2 | 7 | 8 | 9 | 0 | 3 | 2 | 7 | 5 | 0 | 1 | 8 |
| 9 | 4 | 5 | 3 | 2 | 8 | 7 | 1 | 0 | 3 | 0 | 4 | 3 | 2 | 2 | 4 | 0 | 7 | 9 | 3 | 3 | 3 | 3 | 3 | 0 | 4 | 5 | 8 | 1 | 7 |
| 0 | 1 | 2 | 4 | 5 | 3 | 2 | 8 | 4 | 0 | 9 | 2 | 6 | 7 | 3 | 8 | 4 | 1 | 3 | 8 | 3 | 8 | 2 | 0 | 9 | 2 | 2 | 6 | 4 | 8 |
| 5 | 4 | 2 | 1 | 3 | 8 | 0 | 2 | 7 | 4 | 3 | 5 | 9 | 2 | 0 | 7 | 3 | 5 | 7 | 2 | 4 | 9 | 0 | 3 | 7 | 8 | 3 | 9 | 5 | 2 |
| 1 | 4 | 3 | 0 | 0 | 7 | 2 | 2 | 8 | 4 | 3 | 2 | 1 | 3 | 9 | 2 | 7 | 9 | 4 | 5 | 3 | 3 | 4 | 1 | 0 | 2 | 8 | 4 | 2 | 1 |

FIGURE 22: When an office boy applies for a job, what tests do you apply? Many boys make a fine appearance and are neatly dressed, but have not mental powers sufficient to cope with even the comparatively simple problems that their duties present. The test shown here gives a mathematical measure of a boy's powers of attention.

## A TEST FOR CLERICAL ACCURACY

There is presumed to be no familiarity with those forms. Assign a sales number to each person to be tested. The inspector can be taken as number 27. Have the writing done in pencil and the forms filled out completely for typical orders which you can make up like the one mentioned below. Suitable instructions describing the uses of typical department store sales slips like those illustrated should of course be given out to those undergoing the test. The editors of SYSTEM will gladly supply copies of such instructions to readers on request.

Here is a good typical order for assignment under this test: (1) Mr. L. S. Morris, 1635 East 53rd Street, first apartment, near Cornell Avenue, buys a $50 overcoat and pays $40 in cash and asks that the remainder be handled C.O.D.

**MARSHALL FIELD & COMPANY**
CHICAGO

9 10 11 12 1 2 3 4 5 6

Inspector's No. | Date 191 | Salesperson's No. 1

Send to
Address
Near St. Apartment
Instructions
Pkgs. to Enclose

Charge
Address
Order No. or Buyer 354 4

| Quantity | Articles | Price | Extension |
|---|---|---|---|
| | | | |

Floorman
1 Del'd by

Date 191 Am't of Sale

1 354 4

**MARSHALL FIELD & COMPANY**
CHICAGO

9 10 11 12 1 2 3 4 5 6

Inspector's No. | Date 191 | Salesperson's No. 1

Send to
Address
Near St. Apartment
Instructions
Pkgs. to Enclose

Charge
Address
Order No. or Buyer 354 4

| Quantity | Articles | Price | Extension |
|---|---|---|---|
| | | | |

Floorman
1 Del'd by

Date 191 Am't of Sale

1 354 4

**MARSHALL FIELD & COMPANY**
CHICAGO

9 10 11 12 1 2 3 4 5 6

Inspector's No. | Date 191 | Salesperson's No. 1

Send to
Address
Near St. Apartment
Instructions 229
Pkgs. to Enclose

For
Address 6

| Quantity | Articles | Price | Extension |
|---|---|---|---|
| | | | |

1

Salesperson's No. | Inspector's No. | Am't Rec'd | Am't of Sale
1

Date

**MARSHALL FIELD & COMPANY**
RECEIPT
IN CASE OF NON-DELIVERY PRESENT THIS RECEIPT OR TELEPHONE PRIVATE EXCHANGE ONE ADJUSTING BUREAU ASK FOR

229 6

FIGURE 23: Perhaps a test along lines similar to the one shown above can be adapted successfully in your office. We'll all agree, no doubt, that getting a line on the worker's ability before he is hired is a wise step to take—one calculated to save money on labor turnover. Tests like this one are used to advantage in many well-managed offices.

In another case the clerks in a bookkeeping department were shown to be distinctly below grade, on the average. The trouble here was due, perhaps, to a standard of employment which was too low.

**How many tests should be made?**

Another curious fact was that only college graduates were able to make a grade on grammar approaching 100%. In the test there were no rules, definitions, or analyses. There were only common examples of the wrong form and the right form, the employee to choose the right.

Ability to punctuate ran even with knowledge of grammar, except in one firm where the stenographers were of an especially high grade, and had learned to punctuate accurately.

The object of these tests was to find out which tests were practical, how long they needed to be, and what different kinds were required. As a result, twenty short, simple tests were devised and approved by the employment managers of a group of business houses. These tests were adapted, in about an hour's time, to the following ordinary classes of office employees:

**Determining how standards should be set**

Office boys and girls—fundamental education in adding, spelling, and writing a letter of application according to very definite instructions; a test on mental alertness; and a memory test to indicate power to concentrate on hard work.

General clerks, sixteen years of age and older—memory; clerical accuracy (filling out business blanks according to instructions, such as a retail store check); speed and accuracy in handling fractions by short-cut methods and percentages; copying addresses and arranging them alphabetically; and writing a letter of application according to exact instructions.

Stenographers of the lowest grade—memory; advanced spelling; elementary punctuation; copying a typewritten blank for mimeographing; taking a dictated letter and transcribing.

Stenographers of secretarial class or beginning correspondents—memory; full test on grammar and punctuation; advanced spelling; taking dictated letter and transcribing; and, finally, composing three original letters in reply to inquiries relating to four pages of a

**Tests should be practical—not theoretical**

store catalog. These were printed and furnished in advance to the persons tested. The object was to see if they would notice that shoes could not be shipped unless the order gave the size wanted, that questions might be answered by looking at the pictures in the catalog, whether they would use tact and patience in dealing with customers on trifling matters, and whether they could compose and punctuate their letters in good style.

Beginning bookkeepers—speed and accuracy test on arithmetic; test on accuracy (filling out business papers they had not seen before); handling correctly such business papers as checks, notes, money order applications, bank deposit slips, and invoice forms; copying addresses and alphabetizing—but not answering any technical questions on bookkeeping theory.

**Cutting down the factor of personal judgment in hiring**

It was necessary to have a method of grading the tests that would eliminate the variable personal element. The percentage method was abandoned. Speed was measured simply by counting the number of figures in the answers to standard problems in addition, or the like, obtained in four minutes.

You can see how that would work. One person would work enough problems to have ten figures in all, another fifty figures. Of course there were enough problems to keep the quickest busy for more than four minutes, and each problem was easy enough so that even a stupid applicant could get answers to several of them.

Then the number of wrong figures was counted to get a measure of accuracy. Any good clerk could manipulate this system of grading, and, with a key to go by, every person who graded strictly according to directions would get precisely the same results.

**Allowing for personal judgment**

Where personal judgment did enter, as in appraising letter writing, a scale of 5 was adopted—this being about the only system on which different persons could be expected to agree: excellent, 5; good, 4; fair, 3; poor, 2; failure, 1.

In addition, the various factors to be considered were designated. The points overlooked, if any, were counted up. The penmanship was graded by judgment as

**Judging the results of tests**

excellent, good, or fair, as was also the choice of words and the style of expression used in the letter. Finally, every error of whatever kind was counted and recorded as a flat number. All the different elements were thus graded separately.

The next step was to find out what a grading meant in any given case. In other words, was it good or poor to get 80% in spelling, or 75% in grammar? Schools will often arbitrarily take a flat passing grade of 75% on all subjects, whereas it may be easy to get 90% in spelling and hard to get 80% in geometry.

A more scientific way was found. It consisted in giving the tests to several thousand grammar school graduates, then to many high school graduates, then to many typical groups of different classes of employees in business houses—using the average so obtained as a basis for comparison.

**Some standards based on 4,169 tests**

In order to get the averages on the various tests, they were given in various cities from Walla Walla, Washington, to Boston, and between five and six thousand tests were made. All but 4,169 were thrown out as unrepresentative or incorrectly given. The rest were divided into groups as tests on grammar school graduates, on high school graduates, and on business office employees of some experience.*

Thus were obtained three distinct representative standards, which would be useful according to circumstances. All of the tests were carefully graded by one person, who followed strictly the standard, uniform system of mechanical grading.

**What education should an employee have?**

When the results of these 4,169 tests were tabulated, a casual inspection showed some surprising indications.

They seemed to show, for instance, that weak points in our schools are the grammar grades, from which thousands of boys and girls go yearly into business. Grammar school graduates apparently know practically nothing about grammar when tested by such questions as "Would

*A report on these first experiments was made by the U. S. Bureau of Education in Vocational Education Letter No. 5 (March 20, 1916), the Commissioner of Education discussed the matter of standard tests at some length on page 291 of his Report for 1915, and the Associated Schools of Scientific Business have conducted the tests and have prepared for making more. The Bureau distributed the twenty-four-page pamphlet containing the trial tests.

## A Shorthand and Typewriting Test

***Dictate the following letter in three minutes, as much as possible of it is to be transcribed within eight minutes. Accuracy in the work accomplished is to be counted more heavily than merely getting the entire letter done, hit or miss, within the time limit. Margins, indentations and the like are to be handled with care and judgment. The basis for the entire letter is 35 words a minute.***

The 1917 calendar we got out a few months ago appealed very favorably, although it was a little late in the season for the proposition. Several of our customers informed us they had already purchased a calendar supply for 1917, but suggested that we take up the matter early for 1918. We have done so, and enclose two samples which have met with such favor that we have decided to submit the proposition to all our dealers. You may have either one, with your name and business card handled as you wish, at $5 per hundred, express prepaid. We pay the balance. Our name will not appear at all, so the calendar will be yours and you will get a nice piece of work at less than half what you would pay for similar calendars in lots of 1,000, if you placed an order direct. By placing a single large order and contributing a share of the cost, as well as paying for the necessary type changes and express charges, we are enabled to effect this saving for you. We think both samples are very good. The one showing the old windmill has a silk cord the same as the other one, but by some mistake it was omitted from the present lot. A calendar makes a very useful and acceptable remembrance to your trade and is especially appreciated by prospective customers who have no reason for expecting anything of the kind from you. If it is not your practice to distribute a good calendar, we recommend this form of advertising. We know you would make no mistake on either sample and our plan of cooperation cuts the cost to you in half. It is necessary to file additional orders early with the calendar people, in order to have the low price apply. So may we hear from you promptly, telling us which style you wish and the copy you would like printed on your supply?

**FIGURE 24:** Here is a test that you can lift right out of this book and use when you next hire a stenographer. It is standard in one office and the applicants who can take this letter down in shorthand, and transcribe it in the specified time without errors and in a workmanlike manner are found to be up to the standard in experience and training.

you say, 'I have went,' or 'I have gone'?"—simple questions which anyone who knows anything about correct English ought to settle instantly.

**What does a bookkeeper know?**

It appeared that in every department of a business, where the examinations were held, there were intelligent-looking persons who had been hired because they appeared all right and were agreeable, but who were really below average ability. For example, among the bookkeepers of a Denver house, one showed averages as follows, compared with the averages of the department (his own included):

| | Individual | Department |
|---|---|---|
| Memory | Poor—2 | Fair—3 |
| Business Papers | 44% | 75% |
| Bookkeeping Accuracy | 36% | 73% |
| Fractions | Speed—17 | Speed—36 |
| Errors | 11 | 5 |

In a high-grade and carefully selected stenographic department, two girls showed the following comparison, which is indicative, at least:

| | Individual | Department | Another Individual |
|---|---|---|---|
| Words per minute | 15 | 40 | 57 |
| Errors per 100 words | 7 | 2 | 0 |

**Regulating the question of salaries**

That house was not paying the second girl four times as much per week as the first, as the tests indicated she should be paid. Yet she was actually earning about four times as much, and not only did she have a high speed, but she made no errors.

It would appear that correspondence is taught in many schools only as a matter of form. The average on getting the facts right in one high-grade correspondence department in a business house was "good, 4" (5 is perfect, as stated before). Among order writers and similar clerks in another business house, the average was "good, 3½." But in the high schools it was "poor 2—." Tact, among the business correspondents, was "good, 4," among the general clerks, "good, 3½," and in the schools, "poor, 1¾." Form and correct English were, among the business correspondents, "excellent, 5"; among the general clerks, "fair, 3"; and among the schools, "good, 4, plus."

**High school graduates make best showing**

In general, however, high school graduates showed themselves well up to business employees of experience in most subjects, above them in some, and inferior only in the matter of making errors.

Results of the tests show, side by side with individual markings, the averages of grammar school graduates, high school graduates, and business house employees, under the head of "minimum." The "maximums" in each case are the averages of the five highest—a fairer method than taking the one highest, who might be a genius or special expert. A good employee ought to have a record somewhere between the maximum and the minimum.

**Do you know how many words there are in common business use?**

Take spelling, for example. Lists have been made from various sources to show the words that people commonly use. One such list was prepared from a study of two thousand business and professional letters of all kinds. It reveals the fact that seven eighths of all the words used are contained in a list of only 542. Probably less than 100 of these ordinarily give trouble in spelling. It is a simple matter to be sure that pupils, clerks, or stenographers know how to spell these few words.

It is perhaps possible to summarize in somewhat the same way, the common principles of punctuation and the common errors of grammar, narrowing them down to a few pages of drill.

**Why one man believes in fitting stenographers to their jobs**

Until these tests have been standardized and put in convenient form, perhaps it will be difficult to apply them generally. They should indicate roughly, however, standards that office employees should be able to meet. There are certain qualities that may be expected in any applicant.

The qualifications he looks for when hiring stenographers are described by the manager of a western firm which employs about a hundred stenographers. The method of selection without doubt can be applied equally effectively in a business employing but one.

"I have employed stenographers of ten years' experience," he declares, "and tried to mold them to my requirements. Most of them fail completely, usually because too many have set ways which it is hard to

change. I, therefore, prefer to select green girls without experience and, if possible, to get them direct from a good business college.

**Here is how he chooses them**

"My head stenographer usually goes to the school and talks with the students. She dictates test letters and watches them being written, studying the operators carefully before making a choice. If the best results are to be obtained, consideration must be given to education, self-reliance, skill both in typewriting and notes, and personal appearance. The more fully the beginner meets these requirements, the stronger will be the foundation, the quicker the development, and the more efficient the finished stenographer.

**The most important qualifications of a competent stenographer**

"The greatest assets are education and self-reliance. If the candidate has a high school or part college course, the chance of development is greater; though any earnest, intelligent girl who can spell and punctuate and has some knowledge of composition can usually be trained to do satisfactory, dependable work. By self-reliance I mean knowledge of her own ability and skill, as well as of her limitations, and the courage which will enable her to make use of these qualities when they are needed.

**How stenographers can advance themselves in salary in one office**

"The salary we ordinarily pay a beginner varies from $6 to $8 a week according to the locality, the school, and the ability of the student. I usually pay $7 or $8 in order to secure a choice from among the best at the school. When engaging a stenographer, I always arrange that if she proves unsatisfactory at any time within three months, I can release her on short notice, merely stating that her services are not desired. It is often embarrassing to explain the reasons for not keeping her, but if she understands that no explanation is to be given, an unpleasant situation can usually be avoided.

"On the other hand she is told that if she makes good, she will get certain increases in pay at regular intervals. Having a definite goal, she is more apt to put forth her best efforts.

"On the whole this system has proved most satisfactory —I have no doubt that similar requirements and policies can be worked out for many other classes of employees."

## CHAPTER V

# MAKING SURE OF GOOD LETTERS

**Some good rules to follow in letter writing**

THE correspondent for a progressive western house has before him, under the glass top of his desk, a card that reads as follows:

Instead of seeing us from in front of a counter many of our customers see us from in front of the letters you write to them.

Before you start to dictate a letter, be sure you have digested the customer's or prospective customer's letter. Whether it is a complaint or an inquiry, be sure you have put yourself in his place and know just why he is dissatisfied or just what he wishes to know.

Be sure you answer every portion of his complaint or inquiry in language he will understand. If you do not, he will either have to write us again or send his business to some other house.

And do not pass your letter to the mailing desk until you have again read his letter and your answer to it.

He will judge the house by your letter.

**Analyzing the correspondence problem**

No business is so small that it can afford to give a bad impression in its letters, but the man whose office is small may feel that he must rush his correspondence through. By establishing definite standards and policies which all of his outgoing letters must meet, there is no reason why his letters should not give as good an impression as those from the larger office.

In meeting the varying problems brought up by correspondence, the business man must decide which of these methods, varying in cost perhaps from 2 to 30 cents, each letter merits.

1. He may answer it by a printed form. To pencil the number of the form on the letter should relieve him of further thought regarding it.

2. He may answer it by form paragraphs or a form letter; a succession of numbers marked in the letter will give a properly instructed typist or clerk all directions. If he cares to add a personal touch, certain "fill-in" paragraphs or a personal opening sentence or postscript will serve.

**Eight ways a letter can be answered effectively**

3. He may jot down the bearing of the proper answer and let his secretary shape it up.

4. He may turn the letter over to an intelligent secretary without comment.

5. He may dictate certain personal paragraphs and the numbers of form paragraphs to round out the letter.

6. He may dictate a special letter which is to be sent to several widely separated correspondents. Each letter may be specially typed, or the copy may be put upon a duplicator of some sort. There may be "fill-ins" and detailed changes in the body of the letter, which may be left to any stenographer of reasonable intelligence. A rule may be laid down that the first copy typed is to be O. K.'d before the others are written.

7. He may dictate the entire letter to the machine or a stenographer.

8. Where he wishes to show intimate personal interest he may send a brief note in his own longhand.

**Centralizing letter writing usually assures complete answers to all letters**

In cases where it is necessary for more than one department to answer questions or otherwise give the correspondent information, it is the custom in one firm to dictate a brief statement covering the points involved, this statement being written on an office blank. The whole thing is returned to the manager of the correspondence department who has marked it in the first place, and he writes the answer on the basis of the memoranda from the individual departments. These memoranda he pins, with the carbon of his own dictated reply, to the original letter.

By centralizing the answers to complex letters in this way, customers are relieved of a common source of annoyance in not having all of the questions answered at one time. Sometimes, indeed, part of a letter is neglected altogether when several departments must handle it. This insures uniformity in all departments and greatly reduces complaints.

**How this plan saves time of department head**

In another office several copies of a letter are made when there are questions in it which must be answered in several departments. Opposite each paragraph that must be referred to a certain department is written the number of that department. This saves the department head the time required to read the letter through in order to find his part, and, of course, contributes in a measure to a general speeding up of the work.

**Making sure that all points are covered**

The department heads then dictate memoranda. These are sent to the correspondence man, who bases his reply upon the information thus obtained. The correspondence man keeps on his desk a carbon of the office copy of the customer's letter and as he hears from the various departments, he checks the department numbers at the side of the paragraphs. When all the numbers are checked he knows that he has, attached to his carbon, answers to all questions in the customer's letter. With this system, it is possible to get into the mails in a few hours a letter involving several departments.

But speed and accuracy are not the only considerations in letter writing—courtesy and clearness are important, no matter if you write only one letter a day.

**How form letters and paragraphs save time**

Form letters and form paragraphs not only save time and money but, if properly composed, in many cases insure that the letter is the best that can be sent.

The Portland Cement Association has solved this problem in an interesting way. Its technical bureau receives many inquiries as to the best ways to use cement for various purposes. A committee has investigated each use for cement and prepared a standard letter about it.

We will suppose a letter from Oklahoma reaches the head of the technical bureau, requesting information about certain technical details of concrete oil-tank construction. The head of the bureau turns to a small looseleaf book, ready to hand, which contains the correspondence topic index. Here is recorded, by subject, every use of concrete previously covered by correspondence. If the inquiry introduces an unknown use, the answering letter is delayed and the reply to this particular inquiry is then carefully prepared. The information thus obtained is entered immediately in the index.

But oil-tank construction is not a new subject, and the file soon yields the necessary information.

**How difficult technical letters are standardized**

An exhaustive letter on oil tanks now goes forward to the inquirer, together with a neat booklet on concrete tanks in general. It has taken just four minutes to handle the entire matter.

The farmer who has read a silo advertisement and writes inquiring "if acid in silage will eat into concrete" is answered similarly through the farm bureau.

Printed form letters failed to satisfy the officers of the association, so now all form letters are individually typed by an automatic typewriter operated electrically by a perforated roll like a player-piano record. Each letter is a genuine individual letter. The results have more than paid for the investment.

**Form letters and paragraphs met with objections at first**

More elastic than the form letter and yet only slightly more expensive is the letter made up from form paragraphs. Though correspondents sometimes object at first to the use of form paragraphs, they usually grow to like them; such, at any rate, was the experience of the order department in a wholesale house. When the use of form paragraphs was first suggested to the chief correspondent, he spoke decidedly:

"Most of our sales are for large amounts, and our men in the field are competing keenly over every order, with the salesmen from other concerns. For some reason, often personal, the prospect gives us the order. In such a case the buyer does not want his order acknowledged with a stereotyped letter of thanks, which may be cold and impersonal. Perhaps there has been a real fight, with a big order at stake. The prize has come to us. To recognize the favor and maintain our standing, I have to give the customer personal attention, thank him in a way that shows I really mean what I say, and tell him how we will handle his order."

**—but today this concern handles 90% of its letters with them**

In spite of this objection, however, form paragraphs were given a trial; and today about 90% of the order correspondence in this house is handled by the use of these forms, together with a few complete form letters. The letters are quite personal in tone, yet the only portions that are actually dictated are the first and last paragraphs. This is done to add a touch of local color, by mentioning, perhaps, the particular circumstances connected with the order.

There are few departments of a business that cannot benefit in some degree from the use of form paragraphs. They are now in use for sales correspondence, collecting, answering complaints, and handling orders.

An office expert recommended form paragraphs to a client whose sales had fallen off. He brought forth sample letters to show that inquiries had been handled

**Form paragraphs saved $10,000 a year in one office**

by low-priced correspondents, who rarely if ever used convincing sales arguments. Prospects who might have been turned into good customers were often treated in a curt and almost discourteous way. Correspondence in other departments had been equally haphazard.

It was the specialist's advice to standardize the correspondence once and for all. He argued in favor of making up a paragraph book to cover every point in the routine correspondence, and asserted that with it the least efficient correspondent would dictate letters averaging favorably with those of a $4,000 man.

The manager accepted the specialist's verdict, making the exception that some letters must be handled by dictation to assure an effectual personal touch. When the paragraph book was completed and put in use, the company found that it had made an actual money saving during the first year of $10,000 in letter costs. The sales slump, moreover, was completely checked.

**How they were made up**

In making up the series of paragraphs for this concern, the method followed was to keep a triplicate carbon of every letter for a period of 60 days. At the end of this time these carbons were cut up and separated into piles according to paragraph subjects. The subjects were classified and listed, and then, from beginning to end, new paragraphs were dictated to cover every phase of each subject that had been brought out in the analysis. Care was taken to start and finish paragraphs so they would fit naturally with other paragraphs, or would stand alone.

When this work was done, every paragraph was taken up with the department which was expected to use it. Wherever necessary, individual paragraphs were revised. As finally used, they bore the O. K. of all department heads, and were in addition the work of an expert letter writer.

**Every man who writes letters in one concern uses form paragraphs**

The paragraphs were bound in book form and distributed to every correspondent, and to others who had occasion to write letters. The same paragraphs were also distributed among the 35 branches of the company and were placed in the hands of several hundred jobbers having exclusive territory. Thus the entire correspondence of the company from the president's office down was

standardized. Of the greater efficiency in the concern's letters there were many convincing instances.

**How one collection manager "writes" letters**

The use of form paragraphs as applied to collection letters is well illustrated by the methods of a wholesale grocery house.

Going through the little pile of cards that the tickler file brings up for his consideration each day, the collection manager notices the name of a small town dealer who usually is very prompt in paying. Already one letter had failed to bring either the remittance or the dealer's reason. Feeling that there must be some extraordinary cause, the collection man dictates this from his paragraph book:

25.....
20.....17th
301.....
300.....3rd
76.....

The completed letter, which follows, makes an urgent demand for remittance or a reply explaining non-payment but contains nothing to offend the customer:

**Doesn't this letter sound like a personally dictated one?**

> There must be some good reason or we would have had a letter.
>
> We wrote you on the seventeenth, calling attention to a bill of ours that had escaped your attention.
>
> If payment is impossible now, the only fair thing is for you to write or call at once and take this matter up with us.
>
> Enclosed is a memorandum of the bill. Payment, as you will notice, was due on the third.
>
> Let us hear from you at once.

In this manager's system each paragraph covers just one point and fits naturally into the letter before or after almost any of the other paragraphs in the series. Consequently, a correspondent who has grown familiar with his book can instantly make the right combination of paragraphs to fit any case.

**Correspondents soon grow familiar with the plan**

A small slip of paper is fastened to every letter. When the correspondent dictates, he simply marks on this slip the numbers of the paragraphs, in the order he wants

them written, noting also any "fill-ins" to be made. A low-priced typist does the transcribing, replacing a higher-paid stenographer. This change, with the time saving for correspondent and note taker, effects an important economy.

**You can obtain certain types of "automatic letter writers" ready made**

Even more important, however, is the high quality of all letters leaving the house. Each paragraph has been carefully worked out, and in its final shape bears the approval of the management. Naturally, such a paragraph is more effective than one which the ordinary correspondent would dictate offhand.

The form paragraph idea is especially valuable to the manager of the small office, who often feels that other activities, selling perhaps, are more profitable to him than letter writing. Proper form paragraphs will often cut the time required for dictation to the minimum. It is possible to buy these "automatic letter writers" in book form containing standard paragraphs that have been proved effective. They cover sales and collection letters, letters answering complaints, promising shipments and so forth. These books are very valuable especially in the small office. Space is left in them for the addition of "paragraphs" that may be needed in any particular business.

**Saving work on follow-up letters**

Nearly all correspondence systems include a follow-up plan of one kind or another. In order to write an intelligent follow-up letter to a customer, the correspondent must have before him the gist of previous letters to that customer, without having to indulge in a time-consuming search through the correspondence files for carbon copies. Most follow-up systems make use of index cards, on which are entered, in some compact form, synopses of previous letters.

This information must be complete and correct, or there is the possibility that subsequent letters will be inappropriate; and prospective business delayed, if not lost altogether. The labor required to make the entries on the cards is considerable and, when the office is especially busy, this routine work is sometimes neglected. Consequently, the record often runs behind, and the file contains no information concerning very recent correspondence. When replies come quickly, it necessi-

New York

| Dates | No. | Customer | Steam Hoist | | | Electric Hoist | | | Gasoline Hoist | | | Miscellaneous | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Size | Lost | Order | Size | Lost | Order | Size | Lost | Order | Size | Lost | Order |
| 1913 1/3 | 1043 | Penn Constr. Albany | | | | 25HP | Del. | | | | | | | |
| " | 1044 | A. E. Ryan. N.Y. City | 7X10 | | V | | | | | | | | | |
| 1/4 | 1045 | N.Y.C. & H.R.R.R. | 10X12 | Spc | | 60HP | | | | | | | | |
| 1/6 | 1046 | Rockland Quarry Buffalo | | | | | | | | | | 10HP | Belt | V |
| " | 1047 | City Sand Co. Troy | | | | | | | 16HP | P | | | | |
| " | 1048 | Ford Bros. N.Y. City | | | | 10HP | N.P. | | | | | | | |

FIGURE 25: This card shows at a glance just what the customer has asked for and received in the way of quotations. As a follow-up in the sales department it has been found very effective. It is filed geographically and enables the manager to see just what is going on in any territory and aids in keeping salesmen in touch with customers.

| To Whom Addressed | Hand this to | Follow-up Date |
|---|---|---|
| | | Remarks: |

Headings of papers at this end

**Important** When reports are asked for, please make a report within the day of receipt, even if you have nothing to say but "Progress."

Always Return This Folder and Correspondence to Writer

FIGURE 26: Permanent data is rigidly excluded from this follow-up file, which is reserved for active correspondence only. When anyone writes a letter to the person or concern whose name is on the folder, the carbon is sent to this file rather than to the permanent file, as long as the subject is "alive." Later it is transferred to other files.

tates hunting in letter baskets for unfiled letter copies.

**This plan should work in many lines**

A simple and practically automatic letter follow-up system has been in use for some time in a large manufacturing establishment, and has helped to keep quotation records in convenient order It is now easy to get all the facts necessary for writing an intelligent follow-up letter, and for supplying salesmen with complete data at a moment's notice.

A sheet of letter paper size, ruled as shown in Figure 25, on page 63, is used for indexing the follow-up file. There is one sheet for each state, arranged alphabetically in a looseleaf book. The record gives the customer's name, shows what quotations have been made, the date of each, and the quotation number which refers to estimates, drawings and other matters connected with that quotation. In the proper column is a description of the goods. When an order is received, a checkmark is made in the "ordered" column. If no order is obtained, this fact is noted in the "lost" column by means of an abbreviation. A key, kept in connection with the record, gives the meanings of the abbreviations. For instance, "Del." signifies that the time of delivery offered was too long; "Spc." shows that the goods offered did not entirely meet the specifications; "P" denotes that the price was too high; "NP" that no purchase was made, and so on.

**A follow-up file that produces valuable "by-products"**

By glancing down the various columns, it is possible to learn many important facts. For instance, if a certain size or type of article is very frequently recorded with "P," meaning that the purchaser bought at a lower price, it shows that the price and cost of this merchandise needs investigation. In fact, the index pages show, nearly as well as the working of the home office and plant, what competitors can do in various ways, since almost every sale lost means a sale by a competitor under conditions that were met by him. The value of these index pages simply as a sales-tendency record, is, therefore, well worth the clerical work involved.

When quotations are submitted, extra copies of the letters are made in red on thin onion skin paper. These of course, show the exact addresses, description of the articles, prices, terms, time of delivery, and so on. The quotation carbon copies are sorted out from the other

correspondence, holes are punched to fit the looseleaf binder and each copy is placed behind the index page of the state to which it is addressed.

**How to keep "dead" matter out of the file**

If an order results, a check is made in the proper column and the carbon copy removed. If no reply is received, or if it is necessary to send further information, a short memorandum is made on the quotation carbon copy and the date of the second letter noted. Thus, this carbon copy of the quotation gives a complete record of all communications, whether by correspondence or through interviews.

Finally, an entry is made, in the proper column of the index page, that the prospect is "dead" or an order has resulted, and the carbon copy is removed. In this manner the number of the carbon copies in the binder is kept down to a minimum and live inquiries are not buried in obsolete letters.

**Another effective follow-up plan**

The index page with its record abbreviations and checkmarks shows at a glance how far back it is necessary to follow up any letters, and these are arranged by dates with the newest on top, so that they can be gone over in a short time.

A file from which all permanent data and correspondence are absolutely excluded is the basis of the follow-up plan of a large manufacturing concern. This plan has been particularly successful in getting correspondence handled quickly and having instructions and minor details disposed of without delay.

The file is arranged as follows: Three vertical filing drawers carry manila folders, nine by twelve inches, which are printed as shown in Figure 26, on page 63. There are spaces for the name of the addressee, the dictator, and the date of follow-up.

**How it is put into operation**

A carbon copy of every letter and note is made for this file. The copy sheet has a printed space in the upper right-hand corner for notations in regard to follow-up.

When the executive reads and signs his mail, he either marks every carbon for the general file or places a date in the space marked "follow-up." When these carbons reach the filing department they are sorted, and for each one marked for the follow-up file a manila folder is prepared as described above. These folders are first

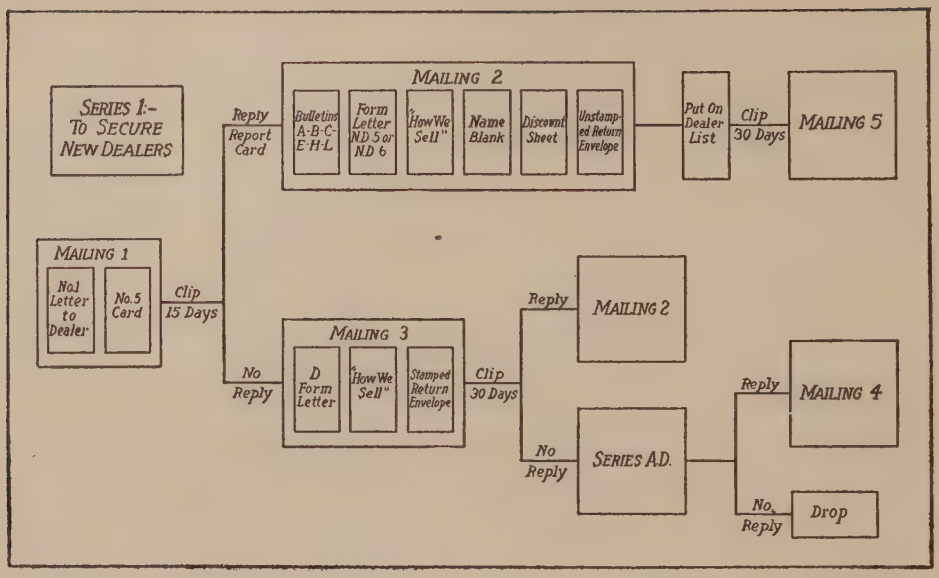



FIGURE 27: To make sure that every prospect gets just the series of form letters that fits him, one concern "blueprints" the follow-ups that fit different cases. The follow-up is thus made automatically correct. One girl can very easily take care of the routine details and see to it that the customer gets the right letter at the right time.

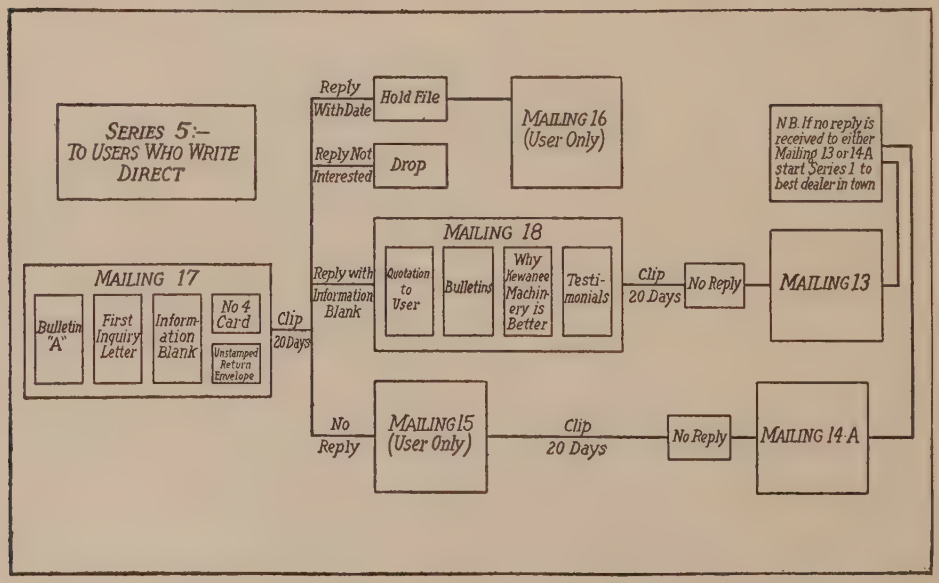



FIGURE 28: When a prospect writes in direct, his inquiry is classified and the routine starts working. It is not even necessary for the sales manager to say "send him series five"—the blueprint says it for him and also tells just what enclosures to send with each letter. This greatly simplifies the routine and insures the customer getting the right lettter.

filed alphabetically by the name of the person addressed; they are then arranged chronologically, according to the follow-up dates, behind the different letters of the alphabet.

**Giving the executive all the facts at the right time**

Incoming mail, before it goes to the executive, has attached to it any correspondence from the follow-up file which pertains to the various subjects discussed. This eliminates the trouble and delay of hunting correspondence after letters are in the executive's hands. He has all necessary information immediately.

Every morning after the incoming correspondence is taken care of, the file clerk looks behind each letter of the alphabet in the follow-up files and removes all folders marked for the current date. He then separates them according to the individuals in the organization whose initials appear in the space allotted to "Hand this to," and delivers them to the proper desks.

"We have borrowed an idea from builders and factory men, and we find it works splendidly in our office," says the owner of a "not-too-large" business. "The idea is the use of blueprints. Blueprints have been used to insure accuracy in shops and building operations for many years, and it was simply the application of an old method to a different problem when we 'blueprinted' our office work. In other words, we mapped out the exact course of letter and follow-up that an inquiry should receive.

**How blueprints are used in one follow-up system**

"We use several sets of prints. Each set covers a class of inquiries which we receive, or shows the plan for a series of letters and circulars sent to names on our various mailing lists. It is not possible to reproduce in these pages the entire series of prints, but the two shown in Figures 27 and 28, page 66, may serve to illustrate the methods we use.

"Series 5, for example, is the one that we send to a prospect who lives in a town where we have no dealer. When the inquiry is brought to the girl in charge of the form letter department, she marks it 'Mailing 17.' This indicates that we will send the 'first inquiry letter,' enclosing information blank, a Number 4 card, and unstamped return envelop, and Bulletin A.

"The 'Number 4 card' has a space in which the prospect may write the date when he will be interested; and

**This plan works automatically**

another space where he can place a checkmark if not interested. If this card is returned to us with the reply 'not interested,' the inquiry is destroyed according to the instructions on the blueprint. If the reply states that the prospect will be interested at some future date, the card is placed in the 'hold file,' from which it is automatically brought out upon the date specified. When a card comes from the 'hold file' we send 'Mailing 16.' This mailing also appears on one of the other blueprints, for it is used in more than one series.

"If the prospect in his reply returns the 'information blank,' then we quote him a price on the equipment best suited to his needs. He gets 'Mailing 18.' This includes the proper advertising matter and bulletins and gives the necessary information about the types of machinery that the prospect specifies.

"When we send this quotation we file the correspondence card to come up again in 20 days. At that time, if we have received no reply, 'Mailing 13' goes to the prospect and is automatically followed by 'Mailing 14.'

**Why there is never any question about "when" or "where"**

"We again file the card 20 days ahead; and if by that time we get no reply, the inquiry again is referred to the dealer and we follow out the process shown in Series 1. This takes the inquiry out of Series 5 and into Series 1, which we continue to its conclusion.

"If we receive no reply at any time from the prospect we follow the routine as shown at the bottom of Series 5. We make out a card for each prospect, and it always shows which form letter has been sent. As a result, our follow-up becomes practically automatic. It is simply a matter of reading the card and the blueprint.

"Each stenographer working on the form letters has a portfolio containing the blueprints and also a complete set of form letters and enclosures. No question need arise, therefore, as to which letter should be sent, or what should go with it.

**A new employee needs "breaking in" when this system is used**

"Another advantage, and not a small one, in the use of this system is that a new girl in the form letter department needs practically no 'breaking in.' The girl in charge of the department simply goes over the prints with her once. If any question comes up after that she can answer it for herself by referring to the prints."

## CHAPTER VI

# SAVING MONEY BY THE LETTERS YOU DON'T WRITE

**Poor letters lost $150,000 for one concern**

IT may cost thousands of dollars and take years of patient effort to land a prospect; but one letter can often spoil the result of all that expenditure. Much has been written about the business-building letter and little said about the business-destroying letter; yet these two types exist and sometimes they are seen issuing daily from the same firm. One department of the concern may be tearing down what another department is laboring hard to create.

You will agree that sales amounting to $30,000 a year to one customer are very much worth while. Yet an account of this size was lost for five years because of a hastily written letter. In other words, orders amounting to at least $150,000 were thrown away because one correspondent did not see fit to use a little tact, or did not have it in him.

A business man who thought letter writing was important enough to warrant study, tells what he did:

**Building good will with every letter sent out**

"A customer worth having is certainly worth keeping; and one department is as responsible as another for keeping him. Every department is a sales department regardless of its name, and every letter that issues from that department should be a sales letter. This, at least, is the attitude we take in our concern; and some of the methods we use to make our policy effective will, I am sure, be of interest to most business men.

"We believe that the opportunity to keep the customer sold is present in every letter we write to him. Consequently, we find it important to maintain just as thorough an inspection of our correspondence as we do of our manufactured product. I shall tell as specifically as possible how we do this.

**How one new letter plan was started**

"Our first step in putting our plan in operation was to center on the weakest spots first. These we located after a few weeks spent in reading all the letters that could be conveniently handled each day—it made no difference to us who wrote them. At the same time we classified each correspondent according to his strength or weakness.

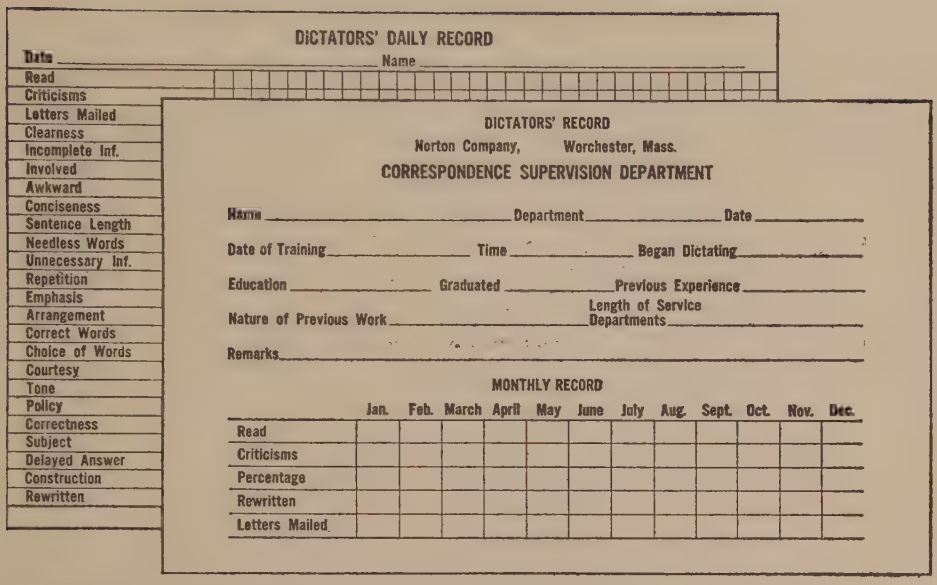
"The next step was to make a list of all the correspondents. Of course, your business may not be big enough, yet, to have "correspondents." That simply makes it all the easier for you to find the weak spots in the letters that go from your office. The "cure" I am telling you about will improve your letters, I am sure, whether you send out one or 1,000 a day. The list we divided into two parts—the 'active' and the 'non-active.' The 'active' list contained the names of those whose work was under inspection, and the 'non-active' the names of those who were on the waiting list. This method we still use. Each week we make a new selection of names, and thus we find it possible to swing around the circle systematically, and to give attention to all.

**"Censoring" the letters is important at first**

"The names of the correspondents are kept on cards—see the illustration in Figure 29 on page 71. You will observe that on this card there is space for keeping a record to show how often in a given time a particular individual's correspondence has been read.

"We find we can accomplish most through criticism of the work of the correspondents. Some good can be done, no doubt, by the circulation of literature among the dictators in the effort to enlist their interest in writing more concise letters, in making clearer statements, in injecting character into the written message, in looking at every situation from the sales angle. It has been our experience, however, that in the long run those efforts are only mildly effective. Most people, we find, do not readily comprehend abstract principles.

"One quality we always insist on is conciseness. Recently I criticised a letter from the angle of conciseness. As originally written it contained 87 words. After carving out the junk, the same ideas were expressed in clearer terms, and with more character, in 39 words. Nothing was sacrificed to courtesy, but the individuality of the writer stood out infinitely more.



DICTATORS' DAILY RECORD

Date _____ Name _____

| Read | | |

**Clearness and conciseness, of course, are of first importance**

"In reading letters we often find statements that are not immediately clear; and many times we find statements that are not clear even after we have carefully studied them. Often I ask other members of the organization to read such letters before they are returned to the writer with our criticisms. Usually the resultant interpretation has been entirely different from that intended by the writer. Yet often we find that a dictator will still contend that his letter is clear simply because it was clear to him—he knew what he meant. We find, therefore, that simply to preach the principle of clearness is seldom very effective. The best plan is to show correspondents where their letters are at fault.

"The correspondence selected for study each week comes directly to the department of supervision before it is returned to the dictator. It is thus possible to stop many undesirable things from reaching the prospect or the customer.

"In making our criticisms we use a slip like that shown in Figure 30 on page 71. We never mark criticisms directly on the typewritten sheet.

"We keep a record of all criticisms on cards like that shown in Figure 31 on page 71. This enables us to follow the correspondents and to know whether they are improving.

**Keeping a record of each man's work**

"The slip bearing this criticism is attached to the letter and goes back to the correspondent. If for any reason the letter should have to be rewritten, the slip and the file copy are stamped 'please rewrite.' Otherwise the file copy bears the 'approval' stamp of the department. The only way that a correspondent knows when his letters are being read is when he notices this approval stamp on his file copies.

"On the next page is a study of the work of five men over a period of seven days. The men entered our employ subsequent to the inauguration of the work of correspondence supervision. All started to dictate under exactly parallel conditions in the same department, and the nature of their correspondence work was practically the same. In the case of these five men we were asked to give our opinion of the individuals as compared with the others at the end of the seven-day period. The

instance shows how valuable the records of the supervision department often prove.

How five men compared as letter writers

| Educational Training | Letters Written | Number Criticisms | Per Cent | Number Rewritten |
|---|---|---|---|---|
| College | 104 | 72 | 69.2 | 22 |
| College | 95 | 54 | 56.8 | 5 |
| High School | 50 | 18 | 36 | 4 |
| Partial College | 114 | 35 | 30.7 | 7 |
| College | 90 | 29 | 32 | 8 |

"The first correspondent had to rewrite more than one fifth of his letters and several of those that went to make up that one fifth might have led, directly or indirectly, to loss of business. Through correspondence inspection it was possible to recognize the fault right at the start and to take the necessary steps to stop it. Had it not been for this supervision, the correspondent would probably have gone on until some big error called attention to the fact that he was writing business-destroying letters.

Why a correspondence manual leaves little to personal judgment

"In this connection, it is well to remember that for every error of this sort which is brought to the surface through some outside 'kick,' there usually are many others that cause customers to drop quietly by the wayside without their taking the trouble to tell us just why they no longer send us orders.

"Our correspondence manual is one of the main supports of the correspondence supervision work. It gives each dictator at once the ideas of the department on all points on which he must be informed if he is to do his best work. The manual is divided into two parts. The first part contains instructions, covering such points as how to operate the dictating machines, how to dictate the address of a letter and the body of the letter, how to make corrections after transcription, how to conduct inside correspondence, and how to write letters to salesmen. I have seen much the same kind of a manual in use in an office that boasted of only one stenographer. No office is too small, I feel, to have standard forms for its letters.

"The second part of the manual is given over to the consideration of such topics as clearness, character, courtesy, opening, closing, prompt replies, service,

**"Breaking in" new correspondents**

attitude, and similar points. The entire work is plentifully illustrated with examples taken from our own correspondence.

"Not all the copy for these manuals is placed in the hands of the correspondents at once. Every week four pages are issued to each dictator. The sheets are kept in looseleaf binders, and are inserted by someone from the department of correspondence supervision. By this means it is possible to lead the dictators through the matter by stages rather than to try to force too much on them at once.

"Each new correspondent must come to the supervision department for training before he is allowed to do any active dictating work. This includes all correspondents, no matter what has been their previous experience in writing letters. We find that usually the green men are easiest to deal with, for they have had no opportunity to form any of the bad habits which correspondents contract only too readily.

**Trial letters show up weak points quickly**

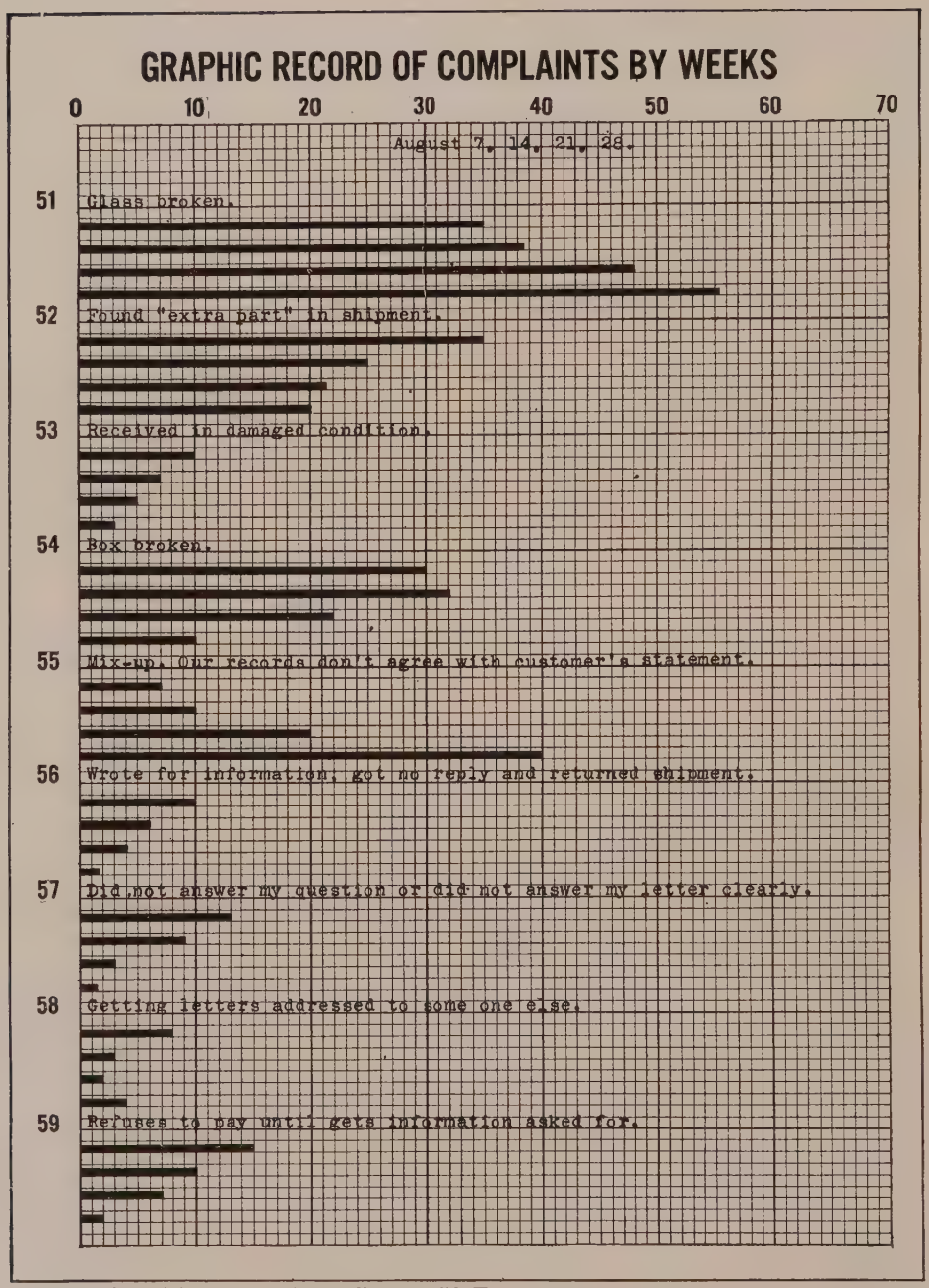
"The new man is first of all given a few actual letters to which he is requested to dictate replies. His dictation is transcribed and the supervisor then carefully goes over it with him. This trial gives us an opportunity to observe the man's good and bad points, and we can decide just what the beginner needs in order to acquire our standards. It is surprising how the weak points will show up during this first period and how much can be accomplished by pointing them out at once, before the wrong habits are formed. All of a man's work is carefully reviewed before any of it ever reaches our customers; and the new correspondent is kept in our 'active' list until in our opinion he can write the kind of letters we think will truly represent us.

"Our supervision applies to all letters that bear a company signature or are written on its stationery. We find that salesmen can be encouraged or discouraged by the letters they receive from the house. So the same rules which apply to letters going to customers apply to those going to salesmen. And the same is true of interdepartmental letters.

"Supervision of the work of the correspondents, we find, is only half the battle. Considerable attention

FIGURE 32: These stenographers have "standard practice sheets" which show them to a "T" how letters must be written. There are rules for paragraphing, punctuating, and abbreviating that standardize all letters. Such a standardization of all letters is always certain to put a good deal of a concern's personality into its correspondence.

FIGURE 33: It seldom pays to expect correspondents to "jest grow." They may be made valuable builders of good will if carefully instructed in the company policy and methods. That's why these young men are "going to school." They are taking a course of instruction in letter writing that will make more valuable helpers of them.


GRAPHIC RECORD OF COMPLAINTS BY WEEKS
0
10
20
30
40
50
60
70
August 7. 14. 21. 28.
51 Glass broken.
52 Found "extra part" in shipment.
53 Received in damaged condition.
54 Box broken.
55 Mix-up. Our records don't agree with customer's statement.
56 Wrote for information, got no reply and returned shipment.
57 Did not answer my question or did not answer my letter clearly.
58 Getting letters addressed to some one else.
59 Refuses to pay until gets information asked for.

*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 34: One concern decided to tabulate graphically all of the complaints it receives from customers. Some of these complaints could not be avoided, but many, too many, of them were caused by careless letter writing. Notice that the last four causes given on this sheet place the responsibility on the correspondence department.

must also be given to the mechanical appearance of our written representatives. It would hardly be good policy to have personal representatives who were shabbily dressed. The same, we feel, is true of letters, and so we take great pains with them.

**Clean-looking letters are important**

"We do not allow our letters to be filled with smudges, blotches, characters struck over each other, ragged margins at the right hand, holes from erasures, misspelled words, abbreviations not clear to the reader, or incorrect addresses that may cause a loss of time. This is a good point for the man with only a small business to remember. He can less afford to give a bad impression than the one with a big business can.

**Standardizing the mechanics of letter writing**

"Sometimes a firm will have as many standards for typewritten work as it has typists. So one of our first tasks was to establish a house standard.

"While we were putting our plan into effect, we gathered all our typists into one room each Monday morning for half an hour. They were given straightforward talks by the supervisor. During the talk we used a blackboard freely, and all the examples given were taken from the letters of the previous week. The girls were required to make notes of what was given them. They later typed these notes on standard sheets of paper and handed them in for correction.

"When they were rewritten, the sheets were inserted in note books furnished by the company. The books were later indexed and each girl retained the copy she had made. Among the subjects covered are such points as spacing, erasures, margins, the address, body, signature, numbers, tabulations, capitalization, punctuation, abbreviations, spelling, and house letters. We also had copies of this manual given to the dictators, for we found that sometimes they had ideas of letter writing which conflicted with our standards.

**All typists go through a training course as well as all correspondents**

"The new typist, like the new correspondent, is not allowed to do any work that will reach customers until she has a thorough understanding of what is expected of her. She is required to make a copy of the manual for herself. In that way she is sure to cover every part of it. We then allow her time to make a study of the complete book, and we give her an examination on it.

**Classes are maintained for employees**

"The work of the typists is regularly supervised in much the same way as is that of the correspondents. The names of the girls whose work is to be sent to the department of supervision for criticism are selected in the same manner as those of the dictators. A record is also kept on cards of each girl's work.

"In our organization we have several classes where men take training courses—lasting from three to eighteen months—in preparation for work in the different departments. Part of this training is compulsory attendance at a class in correspondence. This class is held every Saturday morning from 8:30 until 10:15.

**How the right sort of correspondence methods are taught**

"The class is conducted by the correspondence supervisor and the subject is taught by means of actual problems bearing on the work of the different departments. The students are required to write letters in reply to these problems and to hand them in for criticism. During the week the answers are criticised freely and the following week they are brought to the class, where they are read and discussed. The discussions give each man the benefit of the point of view of all the others.

"We seldom find it wise to give the students bad letters to tear to pieces. It seems far better to allow the men to start with the board clear.

"The savings from correspondence supervision can be felt far better than they can be shown in tangible figures. One account saved may pay the salaries of several people. The rewording of tactless statements may save and make business friends who will continue to send us their orders through the years. We cannot tell how many enemies we might make if we were not so careful.

"There is a tangible side, however: the saving in time alone is enough to justify the expenditure. The training we give to new dictators and typists enables them more quickly to reach maximum production. Improved habits of dictation save time for both the dictator and the operator. The habit of thinking at the time of dictation, instead of after the letter is written, saves much time in correction and revision—and this amounts to quite a lot in either a small or a large organization."

## CHAPTER VII

# THIRTEEN PLANS FOR INCREASING STENOGRAPHIC OUTPUT

**Another factor that is as valuable in the small as well as the large office**

IN the small office there is often insufficient work to warrant more than one stenographer, and yet that one may be hard put to it to finish her day's work in eight hours. It is in just such offices that little time savers and plans for increasing output may make the difference between inaccurate, hurried work and clean, correct work. The manager of a small office is likely to be so busy himself that he feels he has not the time to work out better methods.

He is the man who should get much from this chapter, by reading the methods found best in offices where those in charge have had time to standardize methods in the stenographic department. Certainly you will agree that a plan that will increase the output of 12 stenographers 53% can be successful in speeding up the work of a smaller force.

**This plan increased stenographers' output 53%**

When the present manager assumed charge of the correspondence office of Lord and Taylor's store in New York City, she was given permission to reorganize for effectiveness disregarding precedent. The correspondence of the firm had been conducted after the usual manner. Each executive employed his own stenographer, and in most instances the stenographers were actually at work only a part of the time. Interruptions by visitors and telephone calls, absences of the executives, detail office work—these were some of the representative causes that led to constant waste and inefficiency.

In fact, a study of conditions showed that only a small portion of each stenographer's time was devoted to the actual production of correspondence. The firm was paying for a service that it was not getting—was hiring stenographers to do the half-time work of office boys, at

**A central bureau for stenographic work**

double the salary that should have been paid to boys, and not getting the work done as well, either.

The first step in checking this waste was to create a central stenographic bureau. To this end, 12 of the stenographers who had been scattered about the various offices of the store were selected and set to work in a single good-sized office where they were quite free from intrusion.

The second step was to install a telephone switchboard that would enable each girl to take dictation over the wire from the executive to whose work she was accustomed.

And the third step was to reorganize the correspondence work of the entire concern (with the exception of five stenographers in the private offices of the principal executives) so that this central stenographic department could handle it promptly and accurately.

**Just look at these figures!**

Results are convincing. In 8 months 8 girls were doing the work that the 12 girls had done before. Within a year, 7 girls in all had been eliminated. At the present time the correspondence of the firm is done at a reduction of 50% over what it formerly cost.

The department now consists of 19 stenographers. Their salaries range from $8 to $20 a week. Each is equipped with a desk of modern type and a chair adjusted to the approved height. One standard make of typewriter is used throughout, and each is furnished with noiseless cups, rubber keys, and other labor, noise, and nerve-saving devices. Stationery, clips, rubber stamps, and other necessary materials are arranged in the desk drawers in accordance with a prescribed plan, the aim being to place each worker's tools in the handiest place for effective work. Regular inspection to see that this prescribed order is maintained, moreover, encourages neatness as a habit.

**Here's a novel but tested dictation plan**

The telephone switchboard operator sits at the right of the manager. As each call comes in for stenographic work, the operator connects the stenographer who is assigned to the work of that department. The latter promptly stops her typewriting, adjusts the telephone headpiece, and takes down the dictation, which she transcribes in the regular order of its receipt.

Stenographers are not used for all sorts of work

By this method, as the manager points out, the girls are kept constantly employed at the work they are engaged to do. If the dictator is interrupted, the stenographer resumes her typewriting, and takes dictation again whenever the dictator is ready. No time is lost in waiting. And of course, none of the girls can be assigned to do errands, interview callers, work on the files or be interfered with in their regular duties. The department is working effectively all of the time.

A careful record is made each day of the output of the department, as shown in Figure 35. On it is listed the amount of each kind of work done by each girl. This report can indicate only the speed of the operators.

The saving is due to elimination of waste effort rather than to speeding up

As a check on accuracy, a proofreader goes over each piece of work for typographical and grammatical slips. Then the manager herself reads them to see that the policy of the house is not transgressed by the dictator. A hasty word or an overemphatic statement has often been toned down at her advice, and a temper and perhaps a customer saved for the house.

Five times during each day, at stated intervals, a messenger delivers these letters from the manager's desk to the dictators in the different departments for their signatures.

Definite statistics of the reorganization show just how effective it has been. At the end of the first year, 11 girls averaged 243 letters apiece each week. The ratio of increase in the amount of work accomplished over what had been done under the old system was, in the first year, 37¾%. It has since reached something over 50%. And the increase has not merely been due to a "speeding up" of the workers. On the contrary, the work is done with less effort than before; and in fact it is owing to the careful consideration of the human element involved in the problem that much of the success of the reorganization has been reached.

—and the stenographers like the work better

The girls produce better and more work when it is systematized than when it is not, and the congenial, almost family, atmosphere prevalent in the department has a direct bearing upon both its quality and quantity.

A reorganization in the stenographic department of a bank saved money and actually increased the output.

**Even with 35 girls the work often piled up**

The methods employed should be applicable to the smaller office. The office manager of this bank employed the best stenographers he could get. The record of every applicant for a position was personally examined by him. The lowest salary paid was $75 a month, and as each new stenographer learned the ways of the bank her salary was increased. In the stenographic department the banker employed 35 girls, yet the business of the bank was frequently congested at certain times of the day and important mailings were often delayed.

The expense of the department was great. A number of the junior officers and bond salesmen had private secretaries who were counted as members of the stenographic corps.

"I concluded we were paying too much for stenographic work," says the banker, "and after studying the situation I found that the trouble was chiefly caused by the improper distribution of the work. Sometimes, when one of the officers or salesmen was away from the office, his stenographer felt she could take it easy and resented the request of any other department for assistance.

**The girls now work in squads**

"So we eliminated the private secretaries, except those of three senior officers. The girls were divided into squads of three. A 'relief squad' of five was organized and held in readiness to assist any department where the work was heavy."

Now, when the bank opens in the morning, the various squads appear in the departments assigned to them and take dictation for half an hour. Officers who were formerly in the habit of neglecting their correspondence until the middle of the day have to begin disposing of it promptly; and by limiting the dictation to half an hour, the girls are saved from becoming pen-weary over the book and finger-weary over the machines. The peak of the load is reached in the middle of the afternoon. By disposing of the routine mail early in the day, the rush of business then can be handled without confusion.

One source of saving is to have standards of work and to base salaries upon the degree to which these standards are reached and maintained. The manager of a western office has established such standards and declares that they have worked out to excellent advantage.

## CORRESPONDENCE OFFICE

| | DICTATED LETTER | WITHOUT DICTATION | ESTIMATES | FORM LETTER | FOLIOS F. L. | TOTAL LETTER | TOTAL FOLIO | SPECIAL LETTER | SPECIAL FOLIO | GRAND TOTAL LETTER | GRAND TOTAL FOLIO | HOURS SPECIAL WORK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISS Adams | 3 | 5 | 2 | 6 | A-2 | 8 | A1 | | | 14 | C-9 | 2 |
| MISS White | 6 | 1 | 4 | 1 | C-7 | | | | | | | 1 |
| MISS West | 12 | 8 | 1 | 1 | T-9 | | | | | | | 1 |
| MISS | | | | | | | | | | | | |
| MISS | | | | | | | | | | | | |
| MISS | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | |

LETTERS WRITTEN IN CORRESPONDENCE OFFICE 122
ESTIMATES WRITTEN IN CORRESPONDENCE OFFICE 12
FORM LETTERS WRITTEN IN CORRESPONDENCE OFFICE 98
SPECIAL LETTERS WRITTEN IN CORRESPONDENCE OFFICE 76
TOTAL 308
LETTERS LEFT OVER 42
HOURS SPECIAL WORK 19
DATE 7-15

FIGURE 35: This record for the stenographic department reveals the relative effectiveness of the operators and serves not only as a record of work turned out day by day, but as a fair basis of payment. Quite often it shows that one operator is getting much more than she is entitled to while another may not be receiving what she earns.

Position
Dept.
Salary
Date
Employed by
Do not fill in above space

## APPLICATION FOR POSITION

Name Marion D. Thomas Age 20 Date Feb. 12. 1918
Address 9830 Wentworth Ave. Tel. No. South 6404 With whom do you live? Parents If with parents, state so.
Nationality Irish-Amer Position desired Stenographer Introduced by V. S. Trubloods.

Education
Grammar School Graduated What grade? If graduate, state so.
High School Tilden High How long? If graduate, state so. yes
College Englewood Business Coll. If business college, state so. yes

State below if any special training or qualifications
At present am attending night school at Balter School of Com.

Give below
Name
Mr. J. E. Bu
Mrs. Wm. Dig

## RECORD OF PREVIOUS EMPLOYMENT

Give present or last position first and other positions dating backward.

(1)
Employer Commonwealth Edison Co. Address 72. W. Adams St. Business Public Utility Co.
From July 1917 To Dec 1917 Position held Stenographer Under whom Mr. W. Daly
Salary 15 00 Reason for leaving Wish to do different grade of work.

FIGURE 36: Before you can train a stenographer to maximum effectiveness you must, of course, obtain one who can be trained. Reproduced above is the type of employment application used by one concern, and which has helped considerably in weeding out undesirable applicants before they were hired. It aids in holding down the labor turnover.

**This plan gives a logical basis for grading salaries**

"Not long ago," he says, "a stenographer who had been in our employ some time came to me and asked for an increase in salary. We were paying her $15 a week.

"I was sincerely anxious to give her all she was worth, so I suggested she take a test which would reveal her ability. She agreed. I gave her three tests which we have adopted for stenographers. Instead of being worth $15 a week or more, the tests showed that she was worth only $9. I showed her the results, and told her frankly why we could not afford to pay her more. She saw my side, and declared she wanted to do her best to improve.

"She did. Today she is earning, and getting, $18 a week.

**Time studies made this result possible**

"I was able in this case to determine just what was a fair rate of payment by comparing the employee's ability with fixed standards. We have made a study of stenographic work in our office, and have set standards of pay and performance. We find that this method protects us against overpaying. It also gives employees an incentive to become as efficient as the standard and receive salaries in accordance.

"Having a basis of accurate knowledge of this sort, many problems have solved themselves for us. I am sure a description of what we have done will prove helpful, by indicating how standards may be set in other offices. Few offices are too small to have standards of work.

"Our dictation consists mostly of long, technical reports. Quite often a report will require a week's dictation, and when typed may cover 200 pages. It used to be a wild guess, after dictating a report, when the typing would be completed. Clients would inquire by telephone when they could expect their reports, but we could not give safe estimates.

**How tasks are set scientifically**

"To overcome this I made studies which resulted in a practicable plan for standardizing our stenographic department. The following factors were easily obtainable:

1. Average number of words in a typewritten line, 12
2. Average number of lines to a typewritten page, 26
3. Average number of stenographic pages to a typewritten page, 2
4. Average speed typewriting (words per minute), 60
5. Average time required to typewrite one page (minutes), 5.

"Interruptions sometimes occurred during dictation. This made it impossible for us to estimate the time required to typewrite from the time consumed in dictating. The obvious method, therefore, was to count the number of stenographic pages in the dictation, calculate the number of typewritten pages this would make, and from that figure the time required for transcription.

**The stenographers work on a schedule**

"This method of reckoning is now standard in our offices, and proves satisfactory to ourselves and our stenographers. It is like a railroad time table: stenographers have so much ground to cover at fixed speeds, and they can schedule the time of their arrival. This is a convenience to ourselves, and a source of considerable satisfaction to the stenographers in maintaining a certain standard of proficiency.

**How much work should a stenographer get out?**

"The tabulation of typewriting speeds for various stenographers led naturally to the question: When is a stenographer proficient?

"The system of shorthand a stenographer uses is usually immaterial, I think. Speed is obtained, not from the system of shorthand used so much as from keeping the characters as small as possible and making each character legible.

"We have two fixed requirements for our stenographers: First, they must use pens instead of pencils, for a pencil is a poor substitute for the ever-sharp pen point; second, they must operate the typewriter by the touch system, for this adds much to their speed.

"To determine when a stenographer is proficient, I had first to establish a standard of 100% proficiency. I established a typewriting speed of sixty words a minute, therefore, as my standard of proficiency.

"I had often observed that stenographers handle certain kinds of material more quickly than others. For instance, it seemed to take them longer to transcribe entirely new matter, than something they were familiar with. This was interestingly proved to be the case by the following tests:

**Some simple tests for stenographic ability**

1. Speed while typewriting from stenographic notes
2. Speed while typewriting from straight printed copy
3. Speed while typewriting the special sentence, "Now is the time for all good men to come to the aid of their party."

**Graphic charts give a history of each girl's progress**

"A fair comparison of the variations is shown in Figure 37 on page 87. Stenographer "B" made this record, which may be too high, however, for an average:

1. Thirty words per minute
2. Fifty-four words per minute
3. One hundred and fifteen words per minute.

"We have now established a system of records and curves on the proficiency of our stenographers, and applicants for stenographic positions are given the three tests. Then their records are filed. We thus know how proficient stenographers are at the beginning of their service; and we have a basis for observing whether they are getting better as time goes on.

**Accurate comparisons are now easily made**

"The curves given in the illustration just referred to represent the records of two applicants. A brief study shows the following facts:

1. Stenographer "A" is 100% proficient.
2. Stenographer "B" is only 50% efficient as a stenographer, but is 90% effective as a typist. It would, therefore, be more economical to use "B" on copy work than on transcription, because of her difficulty in reading her notes.
3. Stenographer "B" is capable of greater ultimate maximum efficiency than "A." This is indicated by this greater speed on test 3.

"Note the difference in the angle of the line for the two stenographers in the chart. We have found that stenographers, fresh from training, plot a curve similar to that of "B." As they increase their effectiveness, they change the angle until it becomes an actual attainment plot, as shown in the "A" curve. This may be considered maximum proficiency, although the points of the curve may be raised by continually increased effectiveness.

**How salaries are fixed**

"The curves shown to the right in Figure 16 on page 87 represent the records of a stenographer upon entering our employ, and at later periods when tests are made to determine her wage value. Notice the decreased angle of inclination as greater proficiency is attained.

"Our three tests furnish us a measure of the productive effectiveness of stenographers. Periodical tests enable us to observe increased proficiency. For the standard, or 100% proficiency, we pay $18 a week.

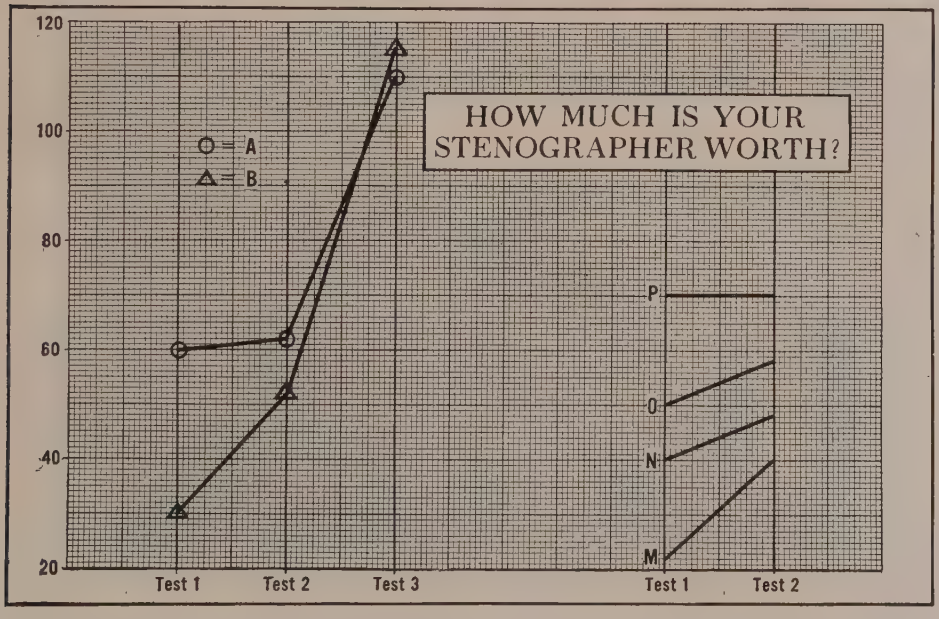



FIGURE 37: If employers always knew the answer to the question asked above, the labor turnover in stenographic help in many concerns would be kept down. This graphic chart shows the results of tests of stenographers described in this chapter, as carried on in one office. Perhaps it will pay you to check up in your office according to this chart.

FIGURE 38: Movable screens of wall board separate the stenographers in one office, and provide them what amounts to private offices with sufficient working room.

FIGURE 39: When the executive who uses this desk finishes dictating, he puts the cylinder in this special rack. The office boy gathers and distributes the cylinders.

FIGURE 40: It's often well to put the typewriters in a room by themselves so that the clatter and crash of the instruments will not disturb the other office workers. Then, too, when the work is centralized better methods of supervision often can be attained, thus making better work possible at lower cost. Note also the excellent lighting facilities.

"Our system satisfies the stenographers, who are paid for what they do, and know it."

**Writing "intentions" rather than words**

The chief correspondent for one firm uses some uncommon methods in training stenographers. These methods should be of especial value to the office man who has only one or two stenographers as he must often rely upon them for more than mere stenographic work. The really valuable girl in the small office is in fact more often a secretary than a stenographer.

"The stenographer who reached the highest plane," says he, "is the one who writes the intention of the dictator, rather than his exact dictation. A busy man in answering letters often says either more or less than he means, and the capable stenographer should know what he is endeavoring to say and put it in proper form just as she takes care of the punctuation and the grammatical construction of his sentences.

**Should a stenographer know the business of the concern?**

In order to do this a stenographer must have some insight into the business. I make it possible, therefore, for new girls to visit the various departments and obtain an understanding of the functions and methods of each section so that they will be in a position to supplement and interpret the dictator's words. In taking notes, a girl must concentrate, of course, on what is being said in order that she may correct any misstatements. After each letter is written she should read it over to be sure it is correct in every detail and conveys the thoughts of the dictator, thus preventing errors and complaints.

"When a new stenographer is employed in our organization, she is given a list of all the words and phrases peculiar to the business to enable her to become familiar with their spelling and meaning, and to practice the shorthand characters expressing them. A shorthand dictionary is also at hand; it has proved a valuable aid even to the experienced operators.

**Maintaining top speed even when the work is slack**

"A stenographer should never go slow with her notes or on the machine. Whether the work be light or heavy, the highest speed must be maintained or efficiency is lost. Many a good stenographer has absolutely spoiled her speed by running slow on light work. This feature demands the most careful watching at all times or the fruit of long training will be lost. The maintenance of

**A plan that keeps spoiled letters out of the mail**

top speed will also accelerate the slower dictators; no one cares to have a stenographer sitting before him with poised and idle pencil.

"The stenographer is taught to watch her letters as she writes them, and if many corrections, restrikes, or erasures are made, to take the letter out of the machine before further time is wasted. All letters that do not have a pleasing appearance when finished, are returned for retyping. Returned work is a mute, but strong criticism. When a letter is returned, one of the lower corners of the letter and the duplicate is torn off, so that it necessitates rewriting and prevents the letter being mailed out or the copy from being filed.

**Saving supplies in the typing of letters**

"The office copy of the second sheet of a letter is written on the back of the first. This saves time, is economical, and also insures the two pages of the letter always being together in the files.

"The various kinds of writing paper are kept in individual compartments. We use either a desk with a divided drawer or cabinets specially made which rest on the top of the desk within instant reach of the girl as she sits at her machine. The increasing regard for quality in correspondence papers makes intelligent handling here necessary if costly wastes are to be avoided.

"Style is a question of judgment and expresses the individuality of the concern. Ideals and standards are set, and the work executed in conformity with them.

"These are our office standards. Before writing a letter, the stenographer looks over the notes and lays out the letters accordingly. If the notes are few, the message is either written on a short letterhead or on a large one with double-spaced typing and wide margins. Where the notes are many, the margins are narrowed to one inch or three quarters of an inch, giving more writing space for the body of the letter. On long letters the typing is single-spaced with a space between paragraphs. As models each girl is given a set of long, short, and medium length letters typed in the style we approve, for placing, spacing of margins, and the like."

**It's often the little items that count—here are some**

There are many little short cuts and methods that can be used by the stenographer to effectsavings and to better her output. Here are a number of plans, which

have been tested in offices and found effective. Many of them are described by the business men who use them.

Some stenographers naturally are not good spellers—but here is a way to train them

*1. A plan that taught stenographers how to spell.*

"Constructive criticism and a 'mistake book' proved valuable in training our stenographers," says an executive whose work requires unusual accuracy and good judgment.

"I sometimes find that an employee, good in every other way, is weak on some particular point. Often this is spelling, for my dictation embraces a wide range of subjects, many of which are technical.

"Suppose the worker's weakness is poor spelling, her work otherwise being good. As she turns in her finished work, I have it gone over with her and have her note carefully in a book, called the 'mistake book,' her violations of Noah Webster's principles. Still further, I have her make a note covering that work and the entire group of words belonging to the same family or governed by the same rule.

"Often this is varied by having her actually look up the word in the dictionary. It is commonly useless to 'mark up' work handed in and merely return it for corrections, as the misspelled word will occur again in a day or so. Words once entered in the 'mistake book,' however, become penalty mistakes for that employee: The workers having the fewest errors listed—and more particularly, duplicated—in their books, get preference in pay and promotion.

"This system takes a little more time at the start, but is a means of getting accuracy—for it may be applied to all errors."

This plan may prevent a costly lawsuit

*2. A plan that makes carbon copies errorproof.*

"We saved waste and money," says a chief clerk, "by abandoning the use of regular carbons between our standard forms. The duplicating composition is run on the back of the original form and as many more as are required. The copies thus secured are clearer than those secured from carbons and they do away with the chance of omitting a piece of carbon between one of several sheets. Errors cannot appear on carbons now if the original is correct."

**Here's a source of help seldom thought of**

*3. How blind typists may be used with excellent results.*

A manufacturing company which uses dictating machines in its correspondence department employs two young blind men as operators and finds them unusually careful and efficient writers. Both men had been educated in a public school for the blind, had learned touch typewriting and, with a little experience, became more capable than many of the other typists.

*4. This "Bulletin of Errors" plan makes the typists careful.*

**One way to cure "hopeless cases"**

A sales manager who has a large volume of dictation to handle each day assigned his best stenographer to read over the letters written by the other girls and make such corrections as were called for. She notes errors in spelling which she corrects and posts each day on the "Bulletin of Errors." This calls the attention of all the girls to the most common mistakes, and prompts them to avoid the unfavorable notoriety of having their names posted. This woman has been with the house long enough to know what the dictator of the correspondence probably intended to say, so that she can pass upon the correctness of subject matter as well as of form.

**It pays to cut down useless effort**

*5. This plan helps in typing envelops and cards.*

"In addressing envelops or typewriting on cards," an office manager says, "the platen is so smooth that it often revolves without gripping the cards or envelops. I find an effective way to keep them from slipping, is to have the typist first insert a yellow second sheet, letting it wind around the platen. The rough surface of the second sheet holds firmly, and enables the girls to work considerably faster."

*6. How to lessen the rush hour stenographic work by utilizing spare time.*

During slack hours, one office manager has his stenographers busy themselves by arranging their stationery for compact piling in their desks. They place first the sheet which is to receive the carbon copy and then the firm stationery, until a large pile is completed, which is

then stored in the center right-hand drawer of their desks. This economizes in piling space for stationery and admits of space along the side of the drawer for a package each of large and small envelops.

Saving time during the rush hour

"It takes only a short time," the manager says, "for the girls' fingers to become accustomed to pick up the two sheets of paper together and lay them on the desk to receive the carbon sheet. It also saves many minutes formerly wasted in reaching three times for paper which was piled separately—once for the carbon copy sheet, once for the carbon paper, and once for the letterhead. Now the entire operation of getting the stationery for writing a letter is centered in the one drawer and causes less fatigue to the operator toward the end of a hard day's work."

*7. Making a large number of "clean" carbon copies.*

This plan may avoid a lot of retyping

"When it is necessary to make many copies of a letter, we use a very thin onion skin paper," says an office manager. "At first we found that, due to the transparency of the paper, the copies were hard to read. To overcome this difficulty we adopted a carbon paper having both sides treated. This gives a much clearer impression due to the fact that it is printed on both sides of the flimsy sheet. The lettering is consequently more opaque and easier to read.

"It is also possible to put a 'book' of flimsy paper and carbon sheets together in the typewriter more quickly, for it is not necessary to consider which side shall go downward. If very thin carbon paper is used the same results may be obtained by putting two sheets of carbon paper together, back to back."

*8. Private offices for stenographers.*

One way to prevent office gossiping

Each stenographer in an eastern advertising office has a private booth, as shown in Figure 38 on page 88. The partitions are made of wall board mounted in substantial wooden frames, with pedestals. They are movable, and therefore adapt themselves readily to rearrangement. They offer every stenographer what virtually amounts to a private office containing all the room necessary for her work.

**What about private offices for typists?**

The booths are in two rows, with an aisle down the middle. Overhead fixtures in this passageway supply illumination. The office manager's desk is across the end of the aisle so that he can keep a watchful eye on the stenographic force as well as though the girls were in an open office.

The advantages of this series of "private offices" are numerous. Each girl has the space that she requires. She is not subject to other employees using her desk even temporarily, with the attendant loss of time that so frequently occurs. The dividing walls do away with the needless "visiting" among the stenographers from which many offices suffer, and confine to a considerable extent the noise from the machines.

**Cutting dictating machine costs**

*9. Cutting dictating machine costs.*

An unusual method of shaving dictating machine cylinders has cut by half one office's bill for this item. The manager one day noticed that the operator had to set the refinishing machine for each record, or else waste an unnecessary amount of wax.

**Another tested time and dollar saver**

To avoid this he had a shelf constructed with numbered spaces for fifty cylinders, and filled it with that quantity of new records in numerically labeled boxes. The office boy now distributes them for dictation, and returns them to their places after transcription. When all have been used, the operator shaves them to uniform size at one setting of the machine.

In this way she requires less time than by the old method of reworking in small lots. Moreover—and this is the important saving—the cylinders are cut only the requisite amount, for the operator sets the machine more carefully than she did when she had to adjust it for each record. Each lot of fifty now gives out at practically the same time, and is replaced by fifty new cylinders.

## CHAPTER VIII

# MAKING ATTRACTIVE WORKING CONDITIONS PAY

How outside influences affect office work

THREE principal natural influences—noise, light, and air—affect the speed and accuracy of office workers, although the workers may not always be conscious of the fact.

Fighting noise consumes strength and attention which should be saved for the day's work. Fatigue follows sooner than it should; ability to concentrate goes; inefficiency and high expense are the results.

What proper ventilation means is indicated by the experience of a New York company, which, by furnishing correct atmospheric conditions for its employees, increased output sufficiently to warrant a 4% reduction in the force.

"Before we succeeded in reducing office noises," says one office manager, this place was almost unbearable. A man could not talk over the long-distance telephone satisfactorily because of the racket, and when we went home at night we were all fagged out.

Why noise often results in friction among employees

"The office is now comparatively quiet. The typewriters, of which there are more than forty, now click but dully. One or two machines in an ordinary room could drown them out. The means which accomplished this transformation? Hair felt."

The anti-noise treatment cost this particular office 1 cent a day for each employee. This is said to be about the average cost under appropriate conditions.

"There is a notable improvement in the general temper of the office," says an executive in an office where the silencing treatment has been installed. "The whole atmosphere is more cheerful, and there is less friction between employees."

Again, noise distracts attention. How often a manager looks up from his desk to wish that the typewriters would

**Benefits from a reduction of noise are sometimes not apparent**

all stop for 10 minutes! Especially when perhaps a hundred employees are concerned, instead of the manager alone. Out in the open office they are thus annoyed a dozen times to his once. The secretary of a Chicago firm found that 10 girls now do the work of 11 in one department since moving them away from the elevator shaft where they lost time in looking up from their work every time the doors clanked.

Excessive noise in an office contributes to an increase of its own volume. Telephones are then yelled into of necessity. In a noisy office the natural human tendency to quiet gives place to an attitude of carelessness in this regard. Conversely, in a quiet office, voices are lowered and the sources of noise hushed.

**Why cure is sometimes better than prevention**

Business noises may be classified accordingly as they arise within the office, or without. In the regular office building, only those coming from inside operations or from the outside through openings need be considered. If adequate ventilation is possible without open doors and windows, the solution for external noise is in keeping them closed. If warm climate or lack of equipment forbids this, the sound must be treated as though it were of internal origin.

Office noise furnishes a case where the most practical treatment is cure rather than prevention. It is easier to deaden the sound than it is to prevent it. This is largely accomplished through the agency of hair felt, although sometimes other preventive measures are taken.

**How felt reduces noise**

In an office where the noise is great, a felt covering for the ceiling and even for part of the wall may be needed. Again, if the uproar is not too pronounced, strips of felt alternating with uncovered widths of ceiling may be adequate. This felt is applied flat to the surface and is usually held in place by narrow board strips along the edges. The felt is covered by a light fabric which harmonizes with the general scheme of the room, and in fact, can usually be obtained to match exactly the decorated surfaces. One concern which has installed this treatment in its office figures that the covering for the felt needs replacement about as frequently as calcimine, and costs about the same. It is difficult for the eye to distinguish the treated room from the untreated.

FIGURE 41: The lighting in this office has two shortcomings. The lights are hung low and are in the line of vision, which causes a glare that hurts workers' eyes. It is badly laid out, making it necessary to arrange the furniture to suit the lighting. Even so, there are bad shadows and insufficient light in spots. This greatly reduces the efficiency of workers.

FIGURE 42: This is the same office with a brand new indirect lighting system, designed to fit the special needs of the office. The general illumination is good and the office has been rearranged to fit the needs of the business rather than the shortcomings of the lighting system. The lighting bill, always worth watching, was reduced at the same time.

FIGURE 43: Plenty of light and fresh air for workers should be provided, wherever possible, experts agree. Natural light from large windows is usually best when it can be obtained. The men in this picture have all the advantages of working outdoors without the disadvantages that bad weather brings. Health and efficiency are thus promoted.

FIGURE 44: Brain and muscle both are apt to get fagged out after two or three hours of top-speed work. When that happens, try throwing the windows wide open, and then go through some simple calisthenics. In the office shown here, work is found to improve materially after five minutes or so of exercise and relaxation.

Different treatment is usually required in the factory office

The factory office presents a more difficult problem than does the office building. The rumble of machinery, borne in by the masonry, complicates matters. To get away from this, the engineer either separates the office acoustically from the factory, or the machinery from the floor. Sometimes both are necessary.

Isolation of a room from heavy machinery noise is generally accomplished by padding the walls and ceiling. Alternate layers of hair felt and sheet iron are frequently used. Brickwork is also good. The reason for this is that sound vibrations, when passing through layers of materials of different densities, dissipate their energy more quickly than in traversing an even greater mass of one material. The brick and mortar serve this purpose, as do the iron and felt.

Machinery, particularly if heavy, is the most annoying source of sound vibrations. It is frequently better policy to isolate the machine so far as practicable. This isolation of machinery has rarely been found to do away entirely with machine vibrations, but it obviates in large measure the necessity for the wall padding. Where the machines are thus treated, much less drastic changes are necessary in the office walls.

Shock absorbers that reduce noise

Several methods have been devised for this purpose. For convenience, they may be divided into two classes—pads and mechanical shock absorbers. These are used as individual cases require, varying with reference to the weight and vibration of the machine. In some extraordinary cases it has been found necessary to mount the shock absorbers on the pads to obtain results. For padding of this type, heavy felt layers or cork strips bound with iron have been frequently used in attaining satisfactory results.

Each of the methods thus far described has as its object the absorption of sound waves after their generation. In some offices, however, it is feasible to prevent the noise rather than to neutralize it.

There are in general use three methods of noise prevention—placing deadening material where blows must fall or doing away with the blow altogether, removing unavoidable noise makers to a separate department, and minimizing motions.

**Several effective ways to cut down on noise**

The first is in use in almost every office. Linoleum or carpet on the floor softens the sound of footfalls and accidental dropping of heavy articles. Door checks prevent slamming. Gates swinging in both directions do away with the bang. Buzzers on telephones supplant bells.

The removal of the chief offenders to a separate department probably originated with the telegraph room where the instruments might clatter continuously without disturbing the general office. Typewriters, addressing machines, duplicators, adding, bookkeeping, and billing machines have followed them into banishment.

Elimination of motion usually eliminates sound and the general efficiency method which places close together departments having frequent dealings with one another is of benefit in doing away with unnecessary racket.

**Typewriters may be silenced in this way**

A Chicago manager who has provided a special room with individual compartments for all dictation finds that the noise in his office has been cut down considerably. Now a department head takes all of his letters or reports to one of these booths and dictates either to a machine or a stenographer as long as is necessary without disturbing other employees.

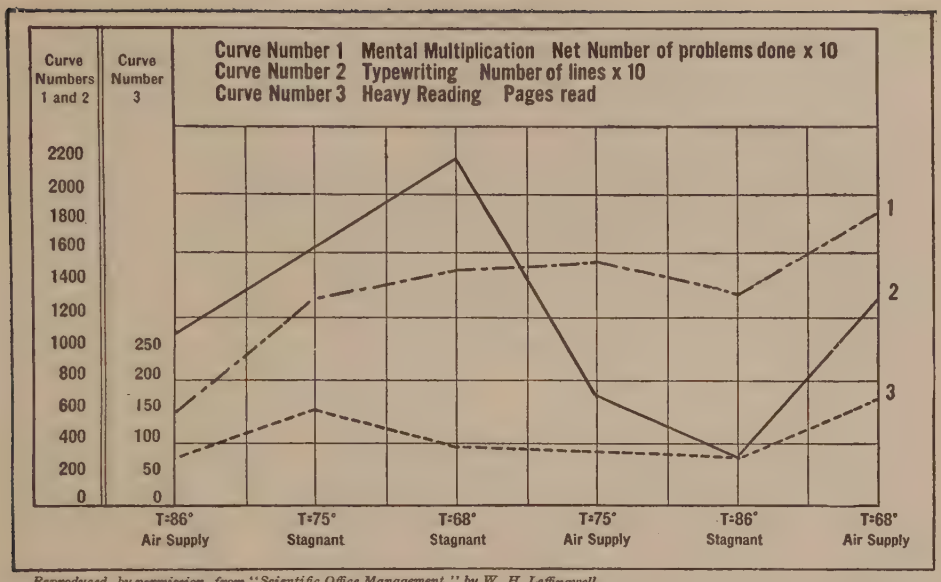
Not only is a great deal of distracting noise in the general offices thus eliminated, but a greater sense of order in the day's routine is brought out. Because he must leave his desk to dictate, the worker is obliged to plan his duties so that letters and reports can be handled on a definite schedule and not at haphazard. Of course, the method does not apply to officials who have private offices of their own.

The idea is adaptable to almost any business where the employees' desks are close together and careful application to work is essential.

The second principal influence affecting the speed and accuracy of office workers is light. The best light for an office is, of course, daylight. Tests have shown this many times.

**Daylight is cheaper and better than artificial light**

In some offices desks can be arranged to take advantage of all the daylight available. However, in many large offices there are some desks which must use artificial light during all or part of the day.



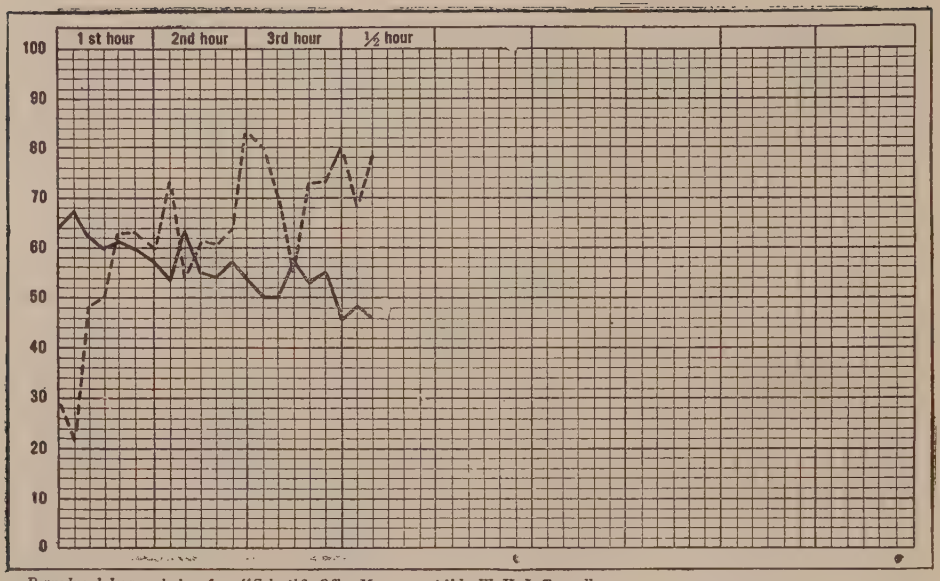

*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 45: This graph shows how temperature and air supply affect three kinds of activity: reading, typewriting, and the working of problems in mental arithmetic apparently increase when fresh air is supplied at a temperature of about 68° Fahrenheit. Stagnant air and high temperatures invariably reduce mental and physical activities.

**AVERAGE COMFORT VOTES UNDER DIFFERENT ATMOSPHERIC CONDITIONS**

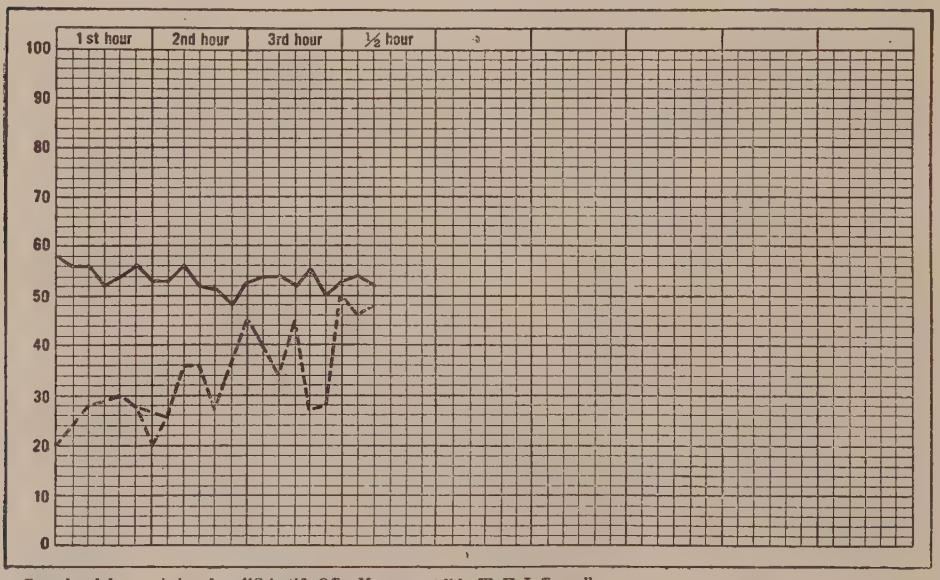
| ROOM TEMPERATURE | | RELATIVE HUMIDITY IN PER CENT | COMFORT VOTE | | | | |
|---|---|---|---|---|---|---|---|
| CENT. | FAHR. | | SERIES I | SERIES II | SERIES VI | SERIES VII | SERIES VIII |
| 10° | 50° | 50 | | | | | 3.4 |
| 20 | 68 | 50 | 3.8 | 4.2 | 4.1 | 4.7 | 4.1 |
| 24 | 75 | 30 | | | | | 3.9 |
| 24 | 75 | 50 | | | 4.1 | 4.6 | |
| 24 | 75 | 80 | | | | | 3.0 |
| 30 | 86 | 30 | | | | | 2.8 |
| 30 | 86 | 80 | 2.8 | 3.6 | | | 3.6 |
| | | | | | | | |

FIGURE 46: The employees in one office were asked to vote on what degrees of temperature and humidity each found most agreeable. Apparently they felt most like working when the relative humidity was 50 and the temperature at from 68° to 75° Fahrenheit. Investigations have proved that atmosphere undoubtedly affects production.




*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 47: The heavy line indicates the number of words a minute written by the operator. The dotted line indicates the number of typographical errors in each 1,000 words. The records were taken in 10-minute periods. Note how at continued top speed the number of errors increases with the fatigue of the worker, which is not surprising.




*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 48: This chart shows the work of the same operator referred to in the above figure, when she was allowed to rest for one minute of each 10. Her effectiveness was almost continuous. Instead, therefore, of this one minute in 10 being wasted, the operator's total output for the day is actually greater than when she was working steadily.

**The first problem in laying out effective office lighting**

In laying out the lighting equipment the principal question is whether to depend entirely on general illumination or to employ a combination of general illumination and desk lamps. As a general rule if the office room is a large one, unbroken by partitions or high furniture, and furnished with flat-top desks, general illumination is best.

When general illumination is used as the only source of light, there are three types that may be chosen. In the order of the amount of current used for a given amount of light, they are, starting with the most economical—direct, semidirect, and indirect. While there is some difference of opinion as to the merits of each system, it is generally agreed that the indirect system gives the easiest light to work under, on account of its softness and the absence of shadows. Semiindirect and direct give the next best results in the order given.

**How bad lighting conditions may often be remedied**

The chief objection to the use of desk lamps is the glare that is apt to result from having a strong light close to the work. Where this method is used a shade should be provided of such a style that the light cannot shine into the worker's eyes. If the office space is broken up into small areas or if there is equipment which casts shadows, it is sometimes necessary to use a small amount of general illumination, helped out with desk lamps to throw a stronger light upon the work.

The two illustrations on page 97 show the improvement that can sometimes be made in an office through a change in lighting equipment. Originally, in this office, the light came from the antiquated chandeliers. The bare light sources resulted in glare and eye-strain. As a result, the office was arranged to fit the lighting instead of for greatest convenience.

**Better light at 10% less cost**

One photograph shows this condition. The other, taken from the same spot in the same office shows what a scientific layout does. The office equipment is now arranged for convenience and effectiveness; the light is on the work rather than in the workers' eyes, and the current consumption is 10% less than it was with the old installation.

No matter what system is decided upon, a material reduction in lighting bills usually can be made by having walls and ceilings light-colored. In this way light rays

**Do you know that paint affects your light bill?**

that do not directly strike the work are reflected and serve a useful purpose. Dark-colored walls absorb light and waste it. Some paints can be had that reflect as much as 90% of the light.

In the case of extensive lighting equipment or alternations it will usually be found cheapest to obtain the services of an illuminating expert. Many electric light companies have men to do this work, whose services are free to customers. A properly designed lighting system is not only cheaper in the long run but will save much in the added effectiveness of workers.

**Does a clerk's cold cost you $24, too?**

The third influence—air—is the subject of many investigations by students and progressive employers.

For example, a large mercantile concern compiled some statistics to demonstrate the approximate loss in employees' time, due to colds caused by faulty ventilation. Taking into consideration the actual losses due to absence, and the less easily computable losses due to lessened efficiency, the cost was set at $24 a cold. Another estimate of the losses occasioned by colds and ailments attributable to them comes from a concern in Baltimore, whose new building was regarded as a model. During the first two winters the percentage of employees absent because of sickness was 27.5%. An investigation revealed defects in the ventilation and heating system. Proper ventilation was provided and the percentage fell to 7%.

**Proper ventilation often will save many times its cost**

That the ventilation and heating of offices has a direct and at times a wide-reaching effect upon workers cannot be questioned. In order to establish standards and methods of measurements and correction, a number of experiments have been made to determine scientifically which ventilation methods are right and which are wrong. Chief among these are the experiments made by the New York State Commission on Ventilation. One of the most important recent discoveries is that temperature and humidity—usually the two most easily controlled factors—have a direct and immediate bearing upon workers, more important in effect on their well-being and capacity for effort than the chemical purity of the air they breathe.

Generally speaking, 68° Fahrenheit was found to be the proper maximum temperature for a room artificially heated. But both the relative degree of humidity and

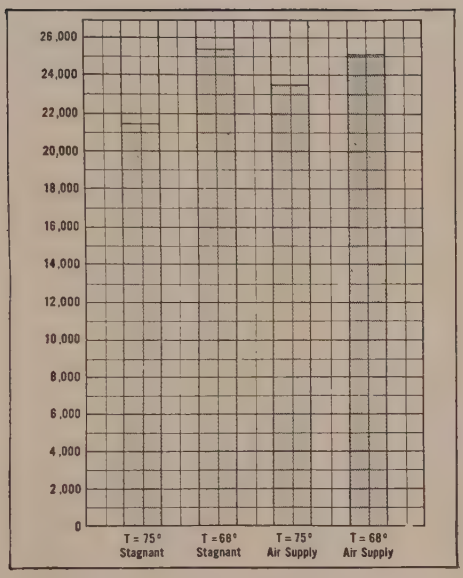



FIGURE 49: A group of men on whom tests were being made did 37% more of precisely the same work at 68° than they did, under exactly similar conditions, at 86°.

FIGURE 50: This machine measures dust. Efficient air-cleaning devices are desirable—where the air supply is liable to be contaminated by dust or other objectionable matter.

FIGURE 51: These men are being studied to determine the effect of atmospheric conditions on their work. For subjects the experimenters selected young men who were placed under observation in squads of four, for periods ranging from five to eleven weeks. These men were carefully selected and were employed from four to eight hours a day.

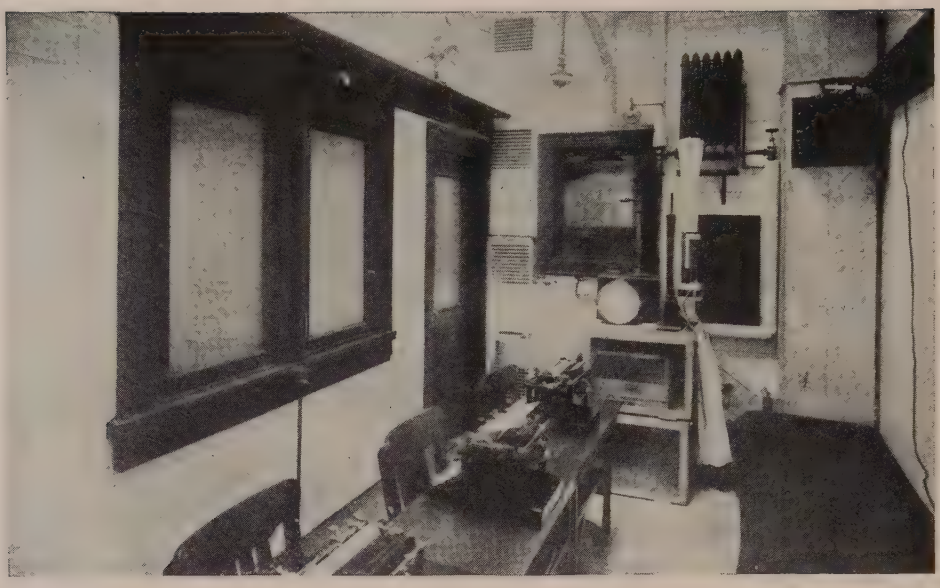


FIGURE 52: In this room tests were made of the effect of temperature and humidity on workers. The tests took from 10 to 30 minutes each. Sometimes the amount of work done was left to the impulses of the men under test, in order to observe the stimulating or depressing effects of atmospheric conditions upon them and also on their work.

FIGURE 53: This device is used by one concern to locate drafts in the office. With colds costing this company about $24 each, it pays to locate and eliminate any conditions that may make employees catch cold. You probably won't want to make as exhaustive an investigation as this company did, but it may pay you to keep an eye on ventilation.

**Sleepy employees don't always keep late hours**

the character of the work that is being done have a bearing upon the ideal temperature, which in itself is merely one of the three elements that enter into the problem of proper heating.

The worker who labors under conditions of bodily comfort is the one who accomplishes the most and the best results. Proper heating and ventilating systems for the office are not alone humanitarian; they are good business.

In the study of the atmospheric conditions under which men and women may work to best advantage, it has been assumed that immediate physical comfort is the standard for the human body, whether the consequences be exemplified in the drowsy stupor that overcomes employees in a hot and stifling atmosphere on a cold day or in the quiet repose that is induced by a balmy summer breeze. Good ventilation produces immediate comfort; unless it does it ceases to be good. And temperature, more than any other single factor encountered, has been shown to be most important in producing that comfort from which the best and most enjoyable effort springs.

**—bad air may be back of their sleepiness**

There is a curious tendency which business men will probably observe with special attention: a warm room—a room is considered warm at 89.5° Fahrenheit—does not tend to affect a man's judgment unfavorably. On the contrary, a high temperature, especially if it be accompanied with a fresh air supply, tends to improve his judgment.

Another pertinent fact was brought out by these experiments—the inclination to work is greater at a fresh air temperature of 68 degrees than at 75 degrees in the proportion that 117 bears to 106. The same tests made at the same temperature but with stagnant instead of fresh air, showed a difference in favor of the lower temperature in the proportion that 119 bears to 100. It seems obvious, therefore, that a temperature of 68 degrees is most desirable in an office. What the relative degree of humidity should be is a point that has not yet been determined, although 50% humidity is generally regarded as correct.

A summary of these tests, insofar as they gage the inclination for mental work, appears in the graphs on page 101.

**What temperature is best for the office?**

Study the graphs carefully. They record the results of these experiments under various conditions of ventilation, and show the influence of varying temperatures, combined with fresh or stagnant air, upon the mental activities involved.

Just what have these experiments in ventilation proved? First of all, that temperatures within the range from 86 to 68° Fahrenheit have a marked effect on certain physiological responses, and that they have an important bearing upon the output of the particular type of labor commonly used in the business office. They prove that the air a worker breathes has such a direct bearing upon his capacity as expressed in output as to warrant a careful consideration of the ventilation problem by the employer as a part of his executive duties. But perhaps the most comprehensive way to summarize the results is to quote the revised list of resolutions passed by the Chicago Commission on Ventilation, which reduced its findings to specific terms by means of them:

**One scientific investigation that has a tangible value for you**

1. That carbon dioxide, as encountered in working practice, is not the harmful agent of major importance in expired air or air otherwise contaminated.

2. That a temperature of 68° Fahrenheit with a proper relative humidity is the proper maximum temperature for living rooms artificially heated.

3. That in the present state of knowledge, it is impossible to designate all harmful factors in or associated with expired air.

4. That the principle of ventilation by currents is preferable to the principle of ventilation by dilution.

5. That for adequate ventilation, smaller volumes of air suffice when introduced by dilution.

6. That ventilation which utilizes the principle of convection in producing currents is more effective and economical than that which neglects this principle.

7. That upward ventilation currents in crowded rooms are desirable, provided the sources of air supply are free from contamination.

8. That in making use of upward ventilation, attention should be given to the counteracting of wall and window chill.

9. That in those processes of manufacture where considerable carbon dioxide ($CO_2$) is liberated, the carbon dioxide content is not a proper index of air pollution.

10. That for the removal of kitchen odors, body odors, stable odors, and other odors associated with heat production, upward ventilation is more efficient than downward ventilation.

11. That the delivery of a certain volume of air per unit of time, per occupant, into a given space does not necessarily constitute ventilation.

12. That air which is introduced into an occupied room in such a way that it strikes the occupants should not be lower in temperature than 60° Fahrenheit.

13. That heating and ventilating are two distinct problems, and, therefore, the installation of heating and ventilating systems, whether separate or combined, should be such that neither system shall interfere with the efficiency of the other.

14. That from the standpoint of health, relative humidity is one of the important factors in ventilation.

15. That efficient air-cleaning devices are desirable in all ventilating installations where the air supply is liable to contamination by dust or other objectionable matter.

16. That the bacterial content of the air is an important factor in all ventilation, and bears a direct relation to the source and quantity of the air supply.

**There are many valuable suggestions in these discoveries**

Employees' production was not up to the standard, the manager of a large factory office knew. Ordinary changes failed to augment the production. It was only when he noticed what was wasting his own time that he discovered the cause of the subnormal results.

**How much do you suppose dust costs you?**

For the first time he really observed the continual procession between wash room and office. He observed clerks taking elaborate precautions each morning to put protectors on their cuffs and moving stiffly about among files for fear of startling the dust.

His stenographers spent too much of their time rubbing out fingerprints, while the bookkeeping department was constantly cleaning up pages.

The office was over the boiler room, and soft-coal dust came in with the deliveries every forty-eight hours. A set of fine-mesh screens over windows improved production so noticeably that the manager moved the office to an upper floor at the other end of the factory. He also had the janitors dust just before work began in the morning.

The changes materially reduced dust, and noise as well. They brought clerical production up to normal standards and enabled him to get along with less office help.

## CHAPTER IX

# FINDING THE RIGHT ARRANGEMENT AND EQUIPMENT

**The proper arrangement of the office is essential to low operating cost**

IN laying out an office it will pay to keep in mind that work should flow through it in much the same way that it does through a well-arranged factory.

Roundabout routing in an office is more likely to be hidden, and congestion of work is usually not so quickly apparent as in a manufacturing plant, but the loss of time and effort may be fully as great.

Now, most of us have no elaborate filing departments. After all, a few desks and a filing cabinet or so, helped along by some mechanical devices, will care for considerable business. But the principle that it pays to keep at it until just the right office arrangement is found, also holds true in the "everyday" offices without big clerical payrolls.

**A small office that handles a lot of work**

For instance, Clyde B. Marston of Brockton, Massachusetts, has a main office which is only 6 by 9 feet. With only 54 square feet available he has to use every single inch of space. In this 54 feet are two desks, an adding machine, a typewriter, and two filing cabinets. The telephone rests on a shelf by itself and the typewriter occupies a shelf at a convenient height for operating. When not in use the adding machine slides directly under the typewriter shelf—the two then taking the space of one. Under the cashier's desk are shelves for filing books and storing the odds and ends of office equipment.

This is, in addition, a private office which occupies a space 9 by 4½ feet in size. It accommodates two desks, two small safes, and a filing cabinet. Although small, the arrangement is so well thought out that from the desk chair Mr. Marston can reach any file or book he wants. On the wall to his right hang two telephone books, and several books which contain advertising sug-

gestions. To his left is the filing cabinet, which contains the names on the mailing list.

**How to chart the office layout**

To determine the best office arrangement, some office managers make a large floor plan drawing of the office space. On this are placed pieces of cardboard, cut to scale, representing the various pieces of office equipment. In connection with these is used a chart showing the routine through which each kind of work must pass. It is a simple matter to shift the cards about until the best possible arrangement for each piece of equipment is obtained. The best arrangement, of course, is the one that gives the most direct routing of work.

**Organizing an office like a factory**

The interrelation of departments is studied in order that all the work may flow, as nearly as possible, in the same direction. The progress of the work should be in a straight line—the shortest path. This does away with "loops" which often cause congestion.

When desks or departments adjoin each other in their proper order, work need not be interrupted in transmission: each clerk after finishing his operation can pass the work to the next in order, without leaving his desk.

How this is done in one office is shown in Figure 54, on page 113. This reduces walking, saves time, and cuts down expense.

**Mechanical devices that save time**

Various mechanical devices are successfully and economically used in many offices for tasks which, before their installation, required the time of employees. An eastern office uses the interesting mechanical ticker shown in Figure 55 on page 113 for assigning the day's work to employees.

It consists of a drum containing 144 partitions, one for each five minutes of the twelve hours. The first thing every morning, these partitions are filled with specially prepared cards containing instructions to each employee for the duties he or she is to perform during the day. Every five minutes this drum revolves, and a bell continues to ring until the card is removed. The attendant notifies the person to whom the card applies, telling him what the instructions are.

With the idea of saving unnecessary steps, one department manager in charge of a dozen or more clerks adopted

a plan of desk arrangement he found in a newspaper office.

In the composing room of this newspaper the typesetting machines were arranged in "U" shape, with the desk of the foreman at the open end of the "U." The city editor was surrounded in like fashion by his reporters; and the circulation manager, with whom the office force consulted, was in the center of a big room.

**An unusual layout that saves steps, noise, and time**

This department manager fell to wondering, on the way home, why his desk was in a secluded corner of his department, and came to the conclusion that employees were wasting a great deal of time coming to his desk.

He rearranged the desks, and since then has not only saved much time, but has found the plan better in a number of other ways. Now all his helpers are close enough to call in an ordinary conversational tone. Formerly, he spent considerable time going to the desks of those too far away to call. The new arrangement has no drawbacks, but many advantages.

**Sometimes one large room is better than many small ones**

If all the office force is in one room, it is easier to secure an economical layout. Ventilation and lighting also are apt to be improved.

The office of an eastern manufacturer is more than two hundred feet long and nearly one hundred feet wide. The filing cases have been placed as nearly as possible in the center of the room. The location was chosen with the idea of making the files just as accessible as possible to everybody, so that reference would be easy. In perfecting the arrangement it was borne in mind that certain departments consulted the files more frequently than others, and these departments are located as near them as possible.

**Why it is well to centralize some work**

The chart, shown in Figure 57 on page 114, gives a general idea of the arrangement of this office. The claim and traffic departments use the files more than any others and are placed as near to the filing department as possible. A claim clerk has only to step across the aisle to call for any correspondence he needs. The stenographic department, where a great many papers intended for the files originate, is also close by. Office boys, who carry papers from the files to other departments, are in an equally convenient position.

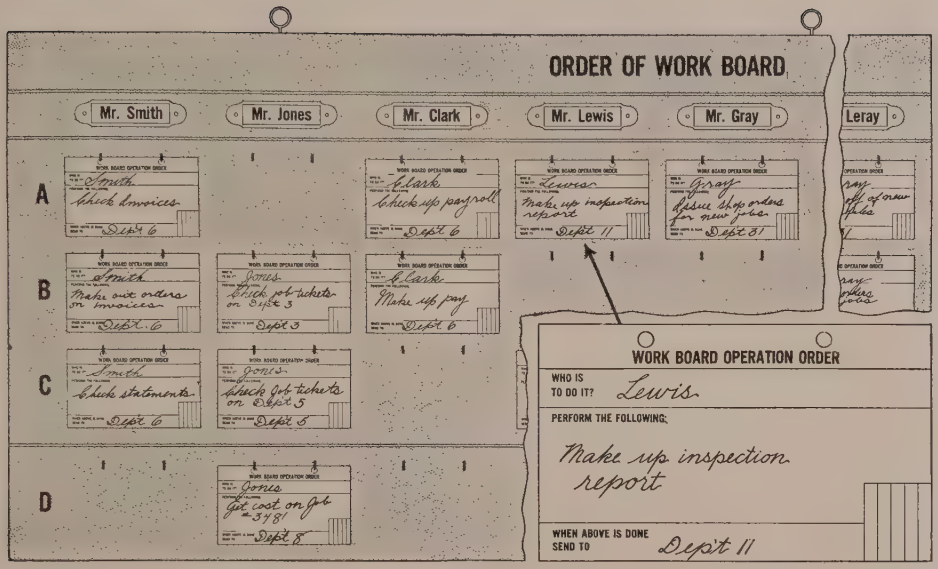



FIGURE 54: For a number of years the effectiveness of planning work so it would come in as raw material at one end of a factory and go out as the finished product at the other, with no intermediate interruption of the smooth flow of the work, has been quite generally recognized. This same principle is now being adopted in a large number of offices.

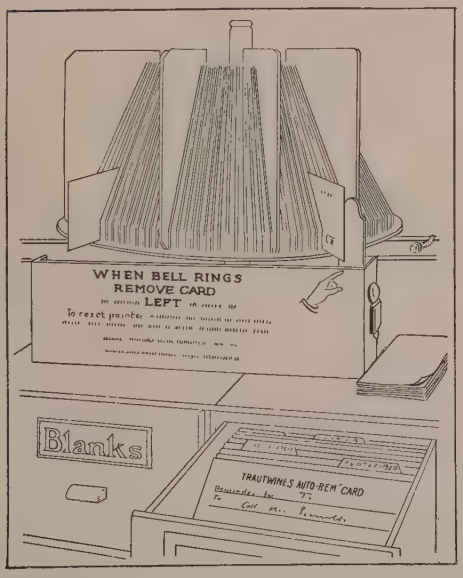



FIGURE 55: In the drum at the top are placed cards with the assignments for workers. At the proper time the drum revolves, and rings a bell, and a girl notifies the workers.

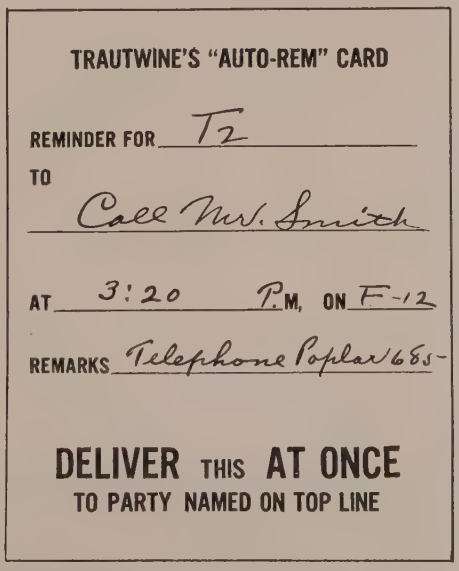



FIGURE 56: This card, used in connection with the "assignment machine" shown at the left, speeds up the work and keeps workers in the office on their toes all the time.

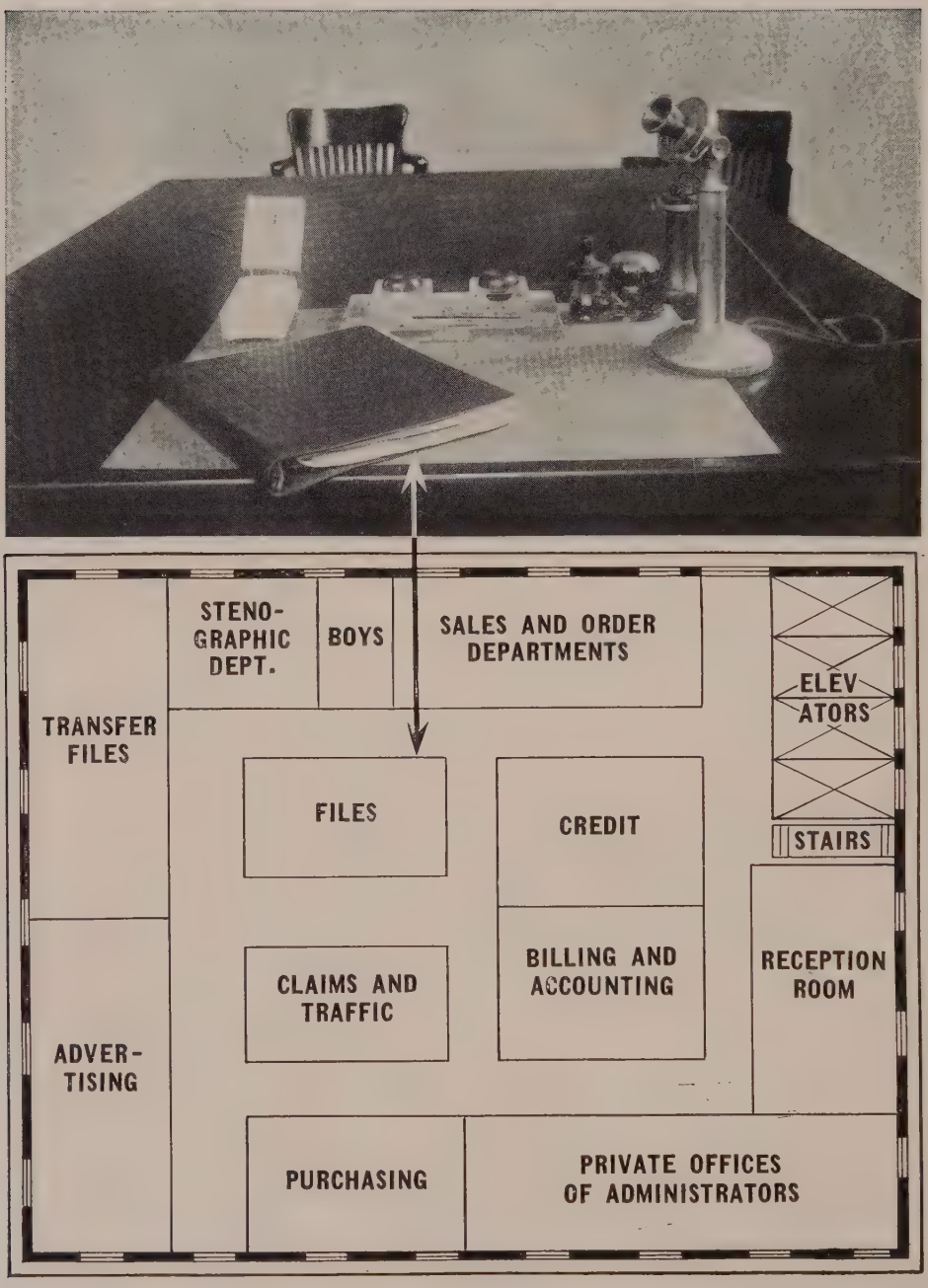



FIGURE 57: The office arrangement shown here has worked out mighty well for one eastern manufacturer. At one time the "live" files were located at the side and much time was lost in reaching them—a disadvantage that was overcome in the rearrangement by placing them nearer the center, as you see. In this case it offers an ideal arrangement.

**The filing work generally can be centralized to advantage**

For the big concern like this one, as well as for the man who can take a dozen steps around his office and touch the four walls of it, the proper placing of files with reference to other work is a matter well worth considering, for reasons of convenience and cost.

In another office, where files were inconveniently located, high-salaried clerks were spending a considerable portion of their time walking back and forth between the file cabinets and their desks and in hunting through the files for stray reports. Whenever two clerks found it necessary to search through the same files, a conversation was often started, lasting in many cases for several minutes, and causing a considerable waste.

The first step toward improving conditions was to transfer the filing cabinets to a corner of the office easily accessible to the clerks in this department, and also to employees of other departments. A young clerk was given a desk near the files, and he alone was allowed access to them. When reports were wanted, it was his duty to supply them, thus saving much of the time formerly wasted by the other clerks.

**What about private offices?**

The extent to which private offices can be used to advantage depends largely upon the nature of the business and the shape and size of the general office. When an executive's work requires deep concentration as in planning, writing advertisements, or editing, he can do better work if protected from distracting influences. A room where conferences and interviews of a confidential nature may be held often takes the place of private offices.

Many executives prefer to have their desks in the open office, both for the air of democracy it gives, and for the effect it has on employees. This result is sometimes obtained by providing the manager with a glass-partitioned office. This gives him good light, fresh air, warmth, and comfort, freedom from noise—in fact, all the advantages of a private office, except that in retaining his view of the outer office he gives some of his own privacy.

**Is it possible to have them minus their disadvantages?**

In other offices, a pane of clear glass is used among frosted panels, or a door is so placed that the manager can watch the run of the work by leaving it ajar. While the heads of large enterprises, in their eagerness to keep in touch with the business, sometimes stay out in the

open office when it is unnecessary, others often lose control of their help by shutting themselves off from them. Private offices sometimes shut off too much light and air from the main office, where most of the wall space is thus taken up by them. A careful arrangement, however, may avoid this.

**Special furniture for special tasks**

As to the layout and equipment of private offices, there are, of course, degrees of convenience and luxuriousness. The office manager will not go far wrong, however, if he lays out his office as a modern kitchen is arranged, placing his equipment so that he can "get a meal" almost without moving out of his chair. Desk, chairs, telephone, files, book cases, and perhaps a table, may be grouped under this plan. If only the one desk is used, the files and book cases can be placed at either side or behind, where they may be quickly reached from the swivel chair.

Just as there is a best method of doing a task, so there is a best tool to use. While, of course, it is not necessary that each clerk have a desk and chair especially designed for him, it is often possible to get better work with special equipment. Sometimes even a slight change in a chair or desk will add materially to speed and convenience. For instance, in starting a system of "file" and "pending" drawers in his department, the attention of a manager was called to the inconvenience of chairs with arms, for the file clerk each morning collects papers from the "file" drawer, and deposits mail and other documents requiring attention in the "pending" drawer of each clerk's desk. Chairs with arms, the manager noticed, made it necessary for each clerk to slide his chair out when the file clerk desired access to the drawers. With the armless chairs, as shown in Figure 58, on page 117, on the other hand, the file clerk could collect and deposit papers without in any way disturbing the clerk at his work. As a result, armless chairs have become standard for clerks in this office.

Most of the desks are of standard design and, with minor changes, can be adapted to special uses.

**Special equipment often lessens fatigue and produces better work**

The work of one clerk who had to write in large, heavy books was made easier by the addition of a block on the desk top, to hold the book on a slant, thus doing away with reaching and straining.

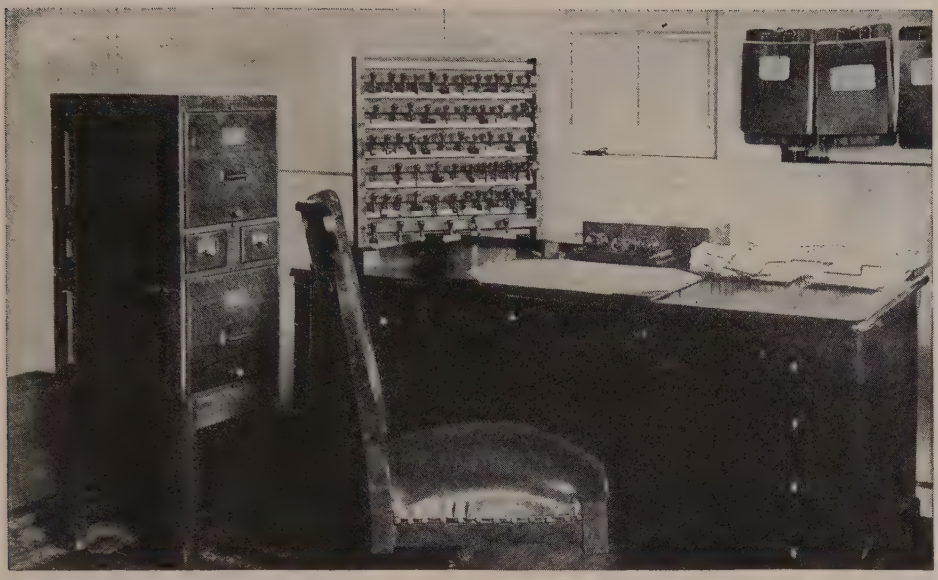


FIGURE 58: Here's a photograph that serves to point out two effective labor reducers. The armless chair—practically unknown for office work 10 years ago—is coming into its own with giant strides. You've all seen a desk drawer chucked full of rubber stamps. Don't you like a neat and orderly rack like this very much better?

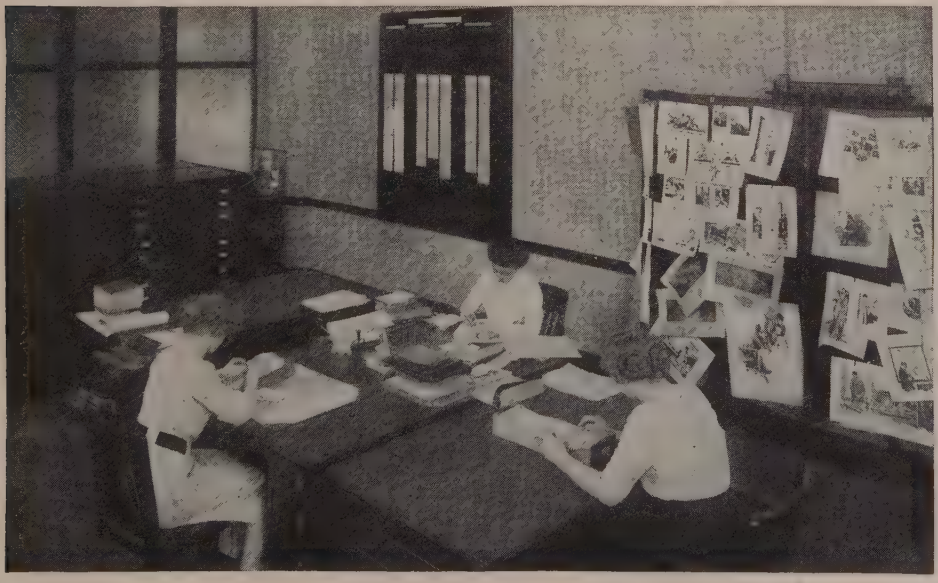


FIGURE 59: It was simple when someone thought of it, but for a long time these girls stood up to sort cards into the cases. Now they work at these tables. Fatigue and lost time has been cut down greatly. Searching out ideas like this, most business men agree, can profitably be done by every man who has others working for him in an office.

FIGURE 60: Here is a cabinet for drawings that has paid its way in one office. The drawings are rolled and slipped into long pasteboard tubes where they are protected.

FIGURE 61: Here we have an end view of the cabinet-and-track plan for filing large drawings or maps. The hinged door is dustproof and can be locked if necessary.

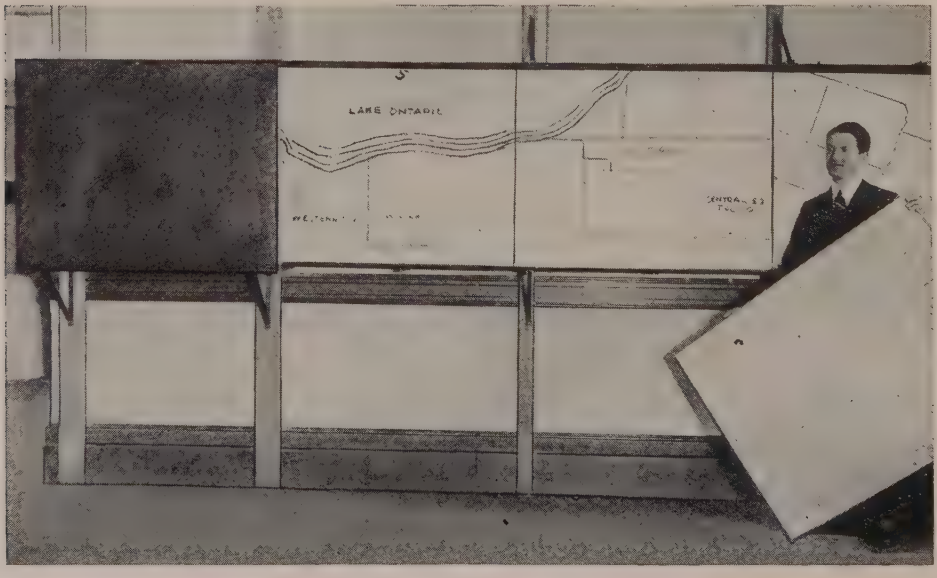



FIGURE 62: Maps present a difficult problem in many offices. They are large, easily destructible, and hard to display effectively. Not so in one office. The map boards shown above slide smoothly out of their case on tracks, and there they are, ready for display. Of course, they are first mounted on heavy fiber board with bound edges.

Sometimes it may be best to buy, or if that is impossible, design, special furniture, such as the tables shown in Figure 59 on page 117, which are used by a Detroit manufacturing company. Constant work at card files tired the girls quickly, and the tables were substituted. They have slanting tops, and the files are stored in the table itself, thus making it unnecessary to carry them about.

A publishing house uses a wide and very long table in its editorial department, on which it is possible to lay out a book or magazine from the first page to the last. Drawings are stored in a cupboard underneath.

**Do you consider a desk a working tool or a storage bin?**

The modern tendency apparently is to do away as far as possible with the high roll-top desk. In many of the larger offices they are used only by executives, if at all. The flat-top sanitary desk with drawers at the left, a shallow and a deep drawer at the right, and the usual middle drawer, now seems to be standard in many offices. Some offices have gone so far as to do away with all drawers in the desks except a shallow one for pencils and pens and the like, thus requiring that all unfinished work be either filed or neatly piled on top of the desk at the close of the day. In most cases this is a great advantage, as men will testify who have had the experience of searching through all the desk drawers in the office to find important papers which had disappeared. This move, from desks designed for storage to those designed for the quickest possible turnover of work, is an important factor in raising the standard of office work.

On top of most desks are two important pieces of equipment—the telephone and the mail trays.

The three-tray basket is in common use, the lower tray for incoming, and the upper for outgoing matter, with the middle one for material destined for the files. This gives the executive rather than the assistant the top tray, which is the handiest.

**Using machines to save manpower**

The use of calculating machines and other types of semiautomatic equipment has proved effective in reducing costs in many offices. In an office in the financial district of a western city, 136 clerks were working in the accounting department. More help and more room were needed to take care of increasing business. In order to

reduce the working force, and to remove further drains on the rental charge, the office was equipped with bookkeeping machines. The services of twenty-four clerks, receiving an average salary of $900 a year, were eliminated when the machines were brought into operation.

**There is standard equipment to fit most needs**

Before machines were introduced, the clerks in another department worked over the big books, and added long columns of figures. Time was lost in handling the books, in sharpening pencils, and in verifying calculations. The problem of handling a volume of more than 100,000 items a day was serious. This department installed machinery that cost $85,000 and reduced the labor cost more than 30%. Another example of the effectiveness of machines is furnished by a smaller office. Five years ago it required five bookkeepers to handle 1,500 accounts and 500 charges a day in this office. Today there are 2,000 accounts and about 750 charges a day, yet the staff has been reduced to four bookkeepers. This saving has largely been made by installing machines.

Filing equipment for correspondence, documents of standard sizes, and card records has virtually been standardized by the manufacturers, and its selection does not present much of a problem to the office manager. A big chart or a bulky blueprint may be very important for future reference, but its size may make it inconvenient to handle in the usual filing cabinets. If it lies around, without a definite place, it is pretty sure to become soiled or lost. As a usual thing, drawings and tracings are handled and filed flat. The most common type of file is an open rack separated into pigeonholes by narrow wooden strips. Often the pigeonhole rack is not enclosed, and dirt and dust accumulate.

**A hard filing problem**

The chief draftsman in an architect's office where blueprints are filed in rolls uses paper tubes as containers. Two, three, and often four sets of drawings are filed in a tube. These plans, however, are not always uniform. Several scales are in use, and different architects have different standards for the size of their drawings, so it seemed impracticable to have a tube to fit each size of drawings. The architect examined several hundred drawings, and concluded to adopt as standards the following sizes of paper tubes: 3-inch tubes, 20 inches long;

FIGURE 63: Here's a piece of equipment of the simplest type—a common display board—but how many offices struggle along year after year with clerks hunting desperately through desks for frequently used data when they might just as well be posted in plain sight. Equipment of this sort is rapidly coming into common use in many offices.

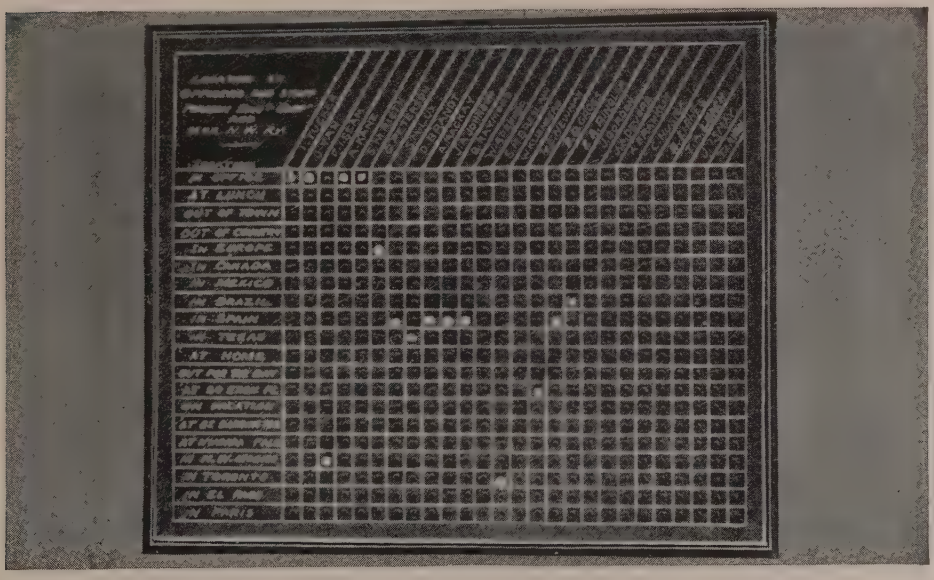


FIGURE 64: Here's a rather novel wall board, but it serves its purpose effectively—keeping a definite office check on the locations of the members of the engineering staff of one corporation. On a larger or smaller scale this plan could probably be used in almost any office. Of course, it might be necessary to make slight changes here and there.

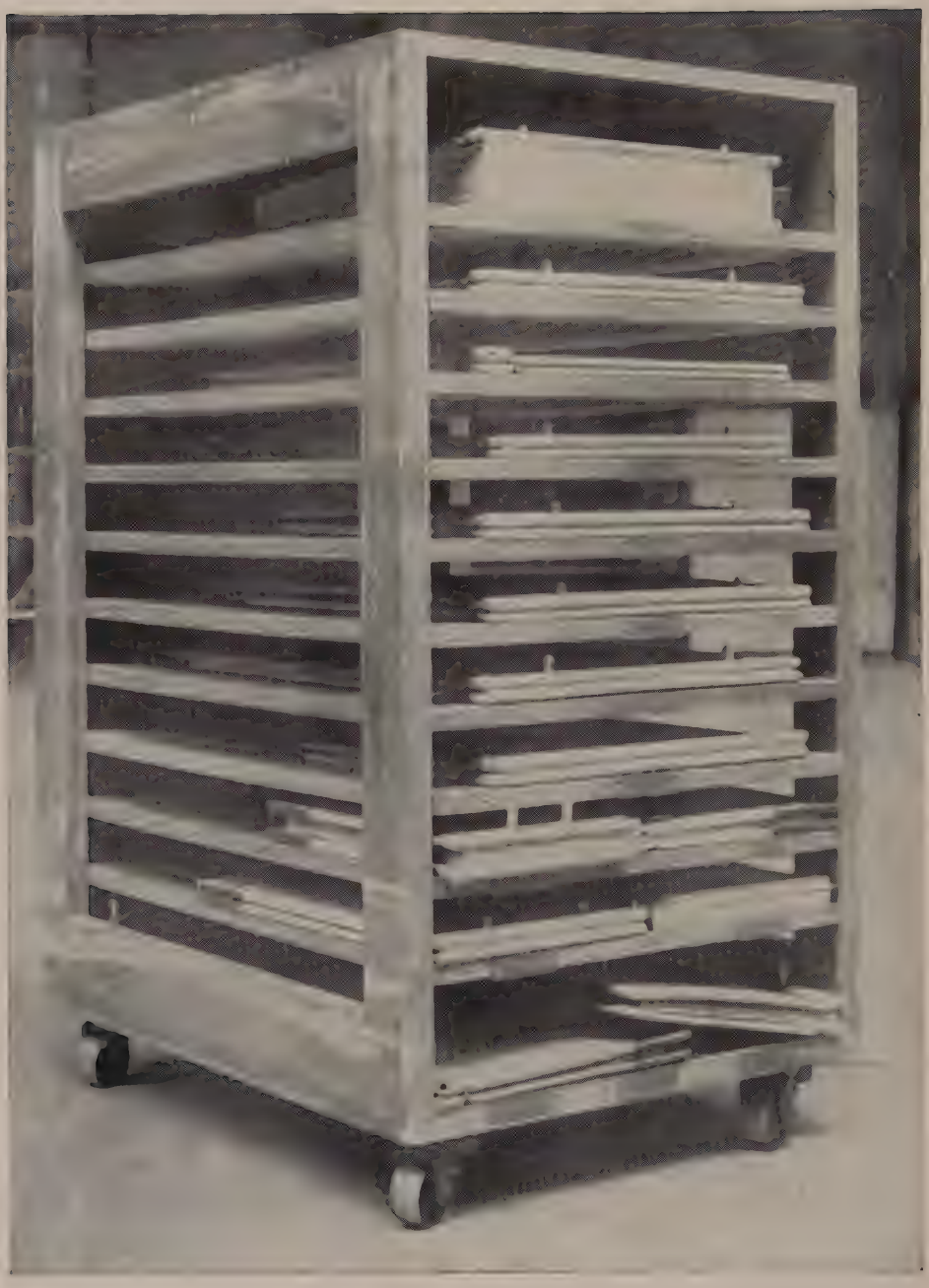


FIGURE 65: If you were a bookkeeper you would appreciate the purpose of this peculiar looking office truck. Even in the smallest office the books often weigh up heavily, and are many in number. This truck, built on a common freight truck base, is used in one office to eliminate the necessity of carrying the books from the vault and back again.

3-inch tubes, 30 inches long, and 3½-inch tubes, 40 inches long.

**How the problem was solved**

Having decided on the size of the tubes, a suitable case was built in which to file them. This case is illustrated in Figure 60 on page 118. There are sixteen sections in this case, each section having a capacity of sixteen 3-inch tubes, or a total capacity of two hundred and fifty-six. The upper two rows are allotted for the 20-inch, and the lower two for the 30-inch tubes. For the sake of uniformity in appearance, all four rows were made the same depth.

**Have you found a way to keep your maps clean and smooth?**

Strips in the inside of the upper two sections are arranged to keep the short tubes from slipping back. Below these four rows are two spaces with drop doors, each with snap handles. In the upper spaces the very large tubes are filed. This section has a capacity of twenty such tubes. The lowest section holds the rolls of drawing and tracing paper used in the drafting room. Doors keep dust out of the tube sections. A similar method of filing might well be used for any kind of bulky papers of uniform size and shape.

The best way to preserve and exhibit large maps and charts is a difficult problem in many offices. One way is to insert them on rollers, but this often results in wrinkling, cracking, or tearing the maps. Then, too, the racks used are seldom entirely dustproof.

An ingenious contrivance which solves this problem is in use in a southern office. The maps are mounted on fiber wall board of a convenient size, and arranged to slide in grooves or tracks along the wall. A picture of the complete outfit is shown in Figure 62. In order that any one of the mounted maps might be placed end to end with any other, each map has a track.

**Here is one way this can be accomplished**

At the end of the track there is housing for the maps. It is constructed of sheet metal with a door at the far end, so the maps may be slid out for changes. This is clearly shown in the photograph on page 118. The maps are mounted on the board and coated first with shellac and then with a good quality of varnish.

To prevent warping, a sheet of paper is pasted on the back of each mount, and this, too, is covered with shellac and varnish. The edges are bound with nickel-plated

steel. The vertical edge at the open end of the housing is made wider than the others, so that it almost touches the edges of the neighboring maps when in the case, and tends to make the housing nearly dustproof. On this edge there is a handle for each map. The whole outfit—housing, tracks, maps, mounting, and edges—cost only about $200, or $10 per map.

**Display boards help visualize the job**

Display boards have many uses about an office. An advertising manager uses the one shown in Figure 63 on page 121 so that he may get a vivid idea of the make-up of work going out of his office.

**Keeping track of men who are out of town**

A concern having several branch offices had great trouble in keeping the various branches posted on the movements of its officials and traveling executives. An adequate system was evolved which solved the problem. A number of large bulletin boards were made, similar to sections of the quotation board that is found in stock brokerage offices. One of these bulletin boards was placed in each of the offices. When Mr. Brown plans to go to Chicago, for instance, a clerk fills in a number of cards in duplicate. These cards state when he will leave, where he is going, and when he will return to his permanent office. One of these cards is sent to each of the branch offices and the information is there placed on the bulletin boards.

**Another board that assists effectively**

A good method of keeping track of officials in the central office is that of a New York firm whose representatives travel extensively. A board, as shown in Figure 64 on page 121, hangs on the wall, having across the top the list of names of the officials; in a column down the left-hand margin is a list of their probable whereabouts. The board has cross and vertical lines of small holes into which wooden pegs are stuck. There is a peg for each official. Thus, if Mr. Gordon goes to Cleveland, a peg is placed in the hole under the name of Gordon and opposite Cleveland. In a less pretentious way, this scheme could be adapted to many offices.

Rubber stamps often are not used as much as they might be, if they were conveniently arranged. In one office a clerk claimed that in the time required to find a stamp he could write out the information in longhand. This was probably true, because the stamps when used

FIGURE 66: Maps, plans, drawings, bulky papers of any sort, so long as they are of fairly uniform size, often can be bound in books and retained for inspection in a roller cabinet like the one pictured above. While this particular roller cabinet is the product of an equipment concern, one equally as serviceable could be built to order at small expense.

FIGURE 67: Here's a file for large papers that answers every requirement made on it in one office. Bulky papers and blueprints are almost always hard to file. This cabinet takes up but little space, is easy to get at, and the complete index above the file shows just where each paper is to be found. The cost to produce it is comparatively small.

had been hung on an inconvenient circular rack in which it was difficult to find the stamp needed for a specific operation.

**Rubber stamps that can't be found are not time savers**

A new rack was finally devised, as shown in Figure 58 on page 117. On this rack the stamps are hung in wire clips which slide along the flat bars forming the front of the rack. They can, therefore, be placed in any position to suit the size of the stamp. As the stamps vary considerably in size, adjustability of this kind is necessary.

Attached to the board itself, just above each row of stamps, a label holder runs the full length of the rack. A label bearing an impression of the stamp is slipped into the holder behind the clip assigned to this stamp.

**This handy rack wastes no one's time**

With this rack it is possible to rearrange stamps, taking out those which are inactive, and adding new ones; and the labels in the rack tell just where every stamp belongs, so that it can be returned to its right place without fail after it has been used, and can instantly be found when needed.

In every business house where there are a number of department managers, the telephone operator often has difficulty trying to find a man who happens to be out of his office. It may take a dozen different calls before he is found, and these calls waste not only the telephone operator's time, but also that of the people who must answer in the various departments called.

**Knowing where 20 men are all of the time**

A Boston office has nearly twenty department managers, who visit each other on business all day long. The general manager solved this difficulty with a simple little "telephone chart" which has reduced the waste time by over 70%, according to the office manager's estimate. The telephone girl is provided with a square sheet of cork about an inch thick and six inches square. The top surface of this has been ruled off into small squares, and across the face of each of these is lettered the name of one department. The girl has a number of tiny silk flags of various colors mounted on small pins so that they will stand upright in the cork. Each flag carries the name of one of the executives. When Mr. Carter, head of the wholesale department, goes to consult with Mr. Bentley, the sales manager, Mr. Carter's stenographer calls the operator and says: "Mr. Carter is

in Mr. Bentley's office." The operator puts the silk flag with Mr. Carter's name on it into the ruled-off square of cork labeled "sales manager," and when calls come in for him she switches them to the right telephone at once.

**A labor-saving truck for bookkeepers**

A piece of an equipment used in several accounting offices is a truck, such as is shown in Figure 65 on page 122. This carries the entire set of current books from the vault and places them beside the bookkeeper's desk. It remains at hand all day, the permanent filing place for the different books, and only at night is it wheeled back to the vault. It is unhandy and unnecessary for one clerk to have to reach over another's head and endeavor to locate from a stack of books the one desired, especially when they all look alike. But it is very easy to find the correct book on its particular shelf on the truck. A good size for this truck is from 22 inches to 26 inches wide, by 30 inches deep, and 42½ inches high, with 12 adjustable shelves. Current binders are usually thin, containing only a few sheets, and so very little space is required between the shelves. One and one half inches, including the width of the shelf itself, is ordinarily ample. These trucks can be made by a cabinet maker, and should not cost more than $10 or $15 each, complete with a dozen shelves.

Before deciding upon the equipment and arrangement of the office, the manager should first be sure that he sees clearly just what work is to be done in the office. Then, forgetting what has been customary in the past, he can take a fresh viewpoint and make the layout in the simplest way to fulfil the object. There should be a good reason for every detail of management—for every piece of furniture. If there is none, it probably is superfluous, and, instead of being a help, it may act as a hindrance.

## CHAPTER X

# FILES THAT FIND LETTERS IN A HURRY

A poor filing system often is worse than none

"WHY do we have a filing department?" The manager of a branch sales office asked this question of his stenographer after an exasperating search for the copy of a bid which had been filed only the day before.

He had never given very serious thought to the filing system. He had considered it more or less a necessity, to be taken as a matter of course. It had, indeed, occurred to him from time to time that his instructions to file papers were usually carried out much more promptly than his instructions to find them when he happened to want them again. But this he had also considered due to the nature of the work.

Why, indeed, file letters, if they were not to be had again promptly when wanted? The manager hastily ran over the facts of the case he had then in mind. A file, he reasoned, should be so organized that once the clerk knew what she was looking for, she would know exactly where to look for it; and the work should be so efficiently done that she would be able to find it there at once. A thorough investigation convinced the executive that the fundamental plan of filing in his office was wrong and must be remedied at once.

Four fundamental ways correspondence can be filed

The study which he made in an effort to remedy conditions showed that he might take his choice of several methods of filing. The four principal methods, he discovered, are alphabetical, numerical, geographical, and by subject. Variations and combinations of these methods are in common use. Each has its particular field where it is best fitted to serve the purposes required of a filing system; but some of the methods are more generally in favor in business houses, and justly so, than the others.

**How these may be combined into the best plan for you**

For his own organization, he decided that a combination of the alphabetical and numerical systems—needing no card index—would best answer all requirements.

In the system he finally decided to adopt, correspondence is filed in alphabetical order, but every piece of correspondence is also given a number. This number is predetermined by the alphabetical arrangement of the letters in the name of the person or firm from whom the letter is received, or to whom it is written, as the case may be. Thus, correspondence with Harry C. Casey might be numbered 65—this number, of course, corresponding with the number of the guide card behind which the letters are filed. The folders are arranged in numerical order in the filing cabinets, and once a clerk knows the name of the correspondent whose letter she is looking for, she can refer to her index and go straight to the correct, numbered folder.

Besides the number, the guide card also contains indicative letters of the alphabet. In the case mentioned, these letters would be CA, and the complete designation on the guide card would be CA-65.

**One plan works out like this**

Obviously, correspondence from another man named Harvey W. Casey would also receive the number 65. Both of these men, if a large number of letters is received from them, would have separate folders in which their letters are placed. Their names and file number are written on the tab of the folder.

Behind each guide card is also one folder for miscellaneous letters containing the correspondence of persons with whom there is little correspondence. Under the reorganized conditions, finding in a hurry in this office is as automatic as filing; and there is no longer a delay in receiving correspondence.

In a good many concerns, small as well as large, exactly the same methods as used in this sales office may be successfully copied; and equal care will result in equally sure filing.

The mistake is sometimes made by managers of supposing that anyone is fitted to do filing. Where the office is large enough to warrant one or more clerks to handle the filing, it is well to choose those who are known to be careful and orderly.

Not every concern could use to best advantage the exact alphabetical-numerical combination chosen by this man. Different requirements suggest varying methods.

**Why an established filing routine is valuable**

The mechanical routine of getting papers into the files, however, is particularly well organized in a larger office having sufficient filing to do to warrant a special filing department, and it may be suggestive—before going on to tell about other methods of filing—to describe this routine exactly.

All papers from the previous day that are ready for filing must be in the filing department each morning by 9 o'clock. Two girls do nothing but sort the papers and get them ready for the others. They work at a desk which resembles a mail clerk's distributing table. In front of them on this desk is a cabinet containing a large number of pigeonholes, each letter size and about four inches high. The pigeonholes are lettered to correspond with the divisions in the file.

**It's up to the correspondent to indicate where a letter should be filed**

Before papers come to the filing department, each correspondent indicates what name he wishes the paper filed under. He underscores the name with a red pencil, and care is taken never to use the same color for any other purpose. This method saves the time of the filing clerks. Were this not done, the girls would have to use their discretion in case an individual signed a letter bearing a firm name different from his own. If the girls chose the firm name, and the papers were later called for under the individual's name, confusion would result.

The girls sort the papers quickly into the correct pigeonholes. When the sorting is well under way, they stop and proceed to place in the upper right-hand corner of every paper the number of the guide behind which the paper is to be filed. They can do this very quickly because they have before them an index list of the numbers on the file guides.

**All the file clerk need do is follow instructions**

Other girls in the department take the papers prepared in this way from the pigeonholes and place them in the proper folders in the files. These girls are required to check the names of correspondents against the numbers assigned to papers by the sorting clerks, and with this double checking errors are caught at once and misfiling becomes a rarity.

**Locating papers that have been "unfiled" is important**

When papers that have been filed are required for reference, the requisitioner fills out a blank like that shown in Figure 68 on page 133. This "out" sheet—as it is called—is just about ten inches high. It is placed upright in the folder from which papers have been taken, and the word "out" shows prominently above the edge of the folder. Thus it is possible, simply by glancing through a drawer, to tell where papers have been removed. The filing clerks every so often check through the drawers for which they are responsible. In case any correspondence has been held for a long time, apparently without reason, a note to that effect is sent to the requisitioner, and he is followed up. When finally the papers are returned, they replace the "out" sheet, which is destroyed.

**How long should letters be kept?**

A green slip is pinned to every paper that leaves the files, bearing the following notice:

> This correspondence is charged to your department and must be returned to the files promptly.
>
> Under no circumstances are these papers to be transferred to any other department except through the file room.

Correspondence is held in the current files of this concern for one year. It is then placed in the transfer files. The latter are easily accessible, only not so conveniently located in the filing department as the current cabinets. Papers remain in the transfer cabinets until they are three years old. They are then removed to a warehouse of the company, where space is not so valuable as in the office. Only after ten years are they destroyed.

**The length of time depends on the nature of the business**

It has been a simple matter for the department to determine how long to keep papers in a place convenient for reference. This has been accomplished simply by noting the dates of papers requisitioned on the "out" sheets. The head of the department has found that letters for the current year are constantly being called for. There are also frequent calls for letters of the previous year, and scattering requests for letters from two to three years old. Beyond that, calls are so rare as not to make it worth while to devote valuable office space to the correspondence.

Differing conditions change the length of time it is necessary to keep letters in different offices. One fairly

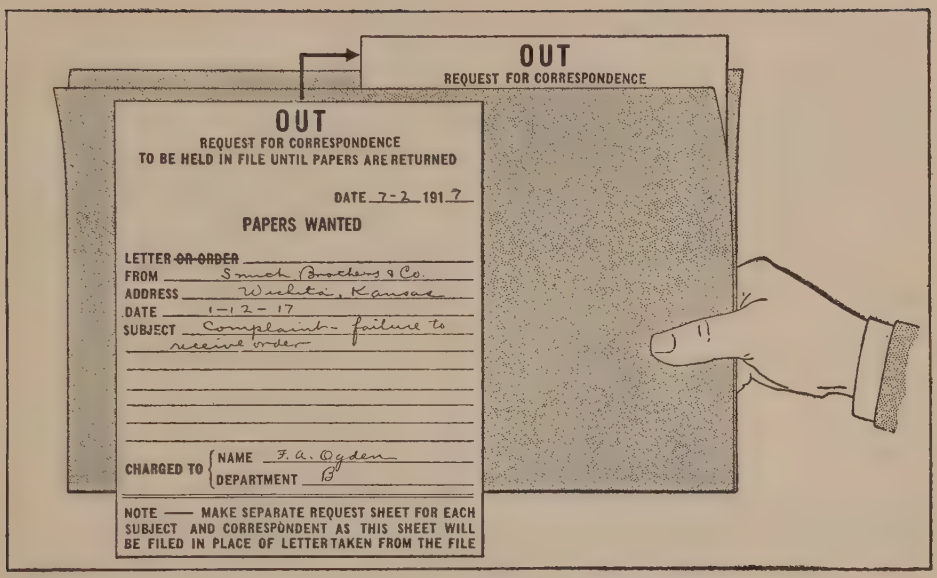

OUT
REQUEST FOR CORRESPONDENCE
OUT
REQUEST FOR CORRESPONDENCE
TO BE HELD IN FILE UNTIL PAPERS ARE RETURNED
DATE 7-2 1917
PAPERS WANTED
LETTER ~~OR ORDER~~
FROM Smith Brockway & Co.
ADDRESS Wichita, Kansas
DATE 1-12-17
SUBJECT Complaint- failure to receive order
CHARGED TO NAME F. A. Ogden
DEPARTMENT B
NOTE — MAKE SEPARATE REQUEST SHEET FOR EACH SUBJECT AND CORRESPONDENT AS THIS SHEET WILL BE FILED IN PLACE OF LETTER TAKEN FROM THE FILE

FIGURE 68: Most of us have had the experience of sending out to the files, and having the clerk report that the correspondence was out and no one knew who had it. Here's a correspondence request that prevents such a situation. This "out" guide is also the requisition blank. It shows plainly to where correspondence has been removed.

FOLD WITH THIS SIDE OUT

Use this slip for all information of value to A. L. J. Co. Take separate sheet for each subject. Use card for all prospects. Circle desired phrase.

**A. L. JOHNSTON CO.**
BAY ST., BOSTON

Date 8/17/15

Attention of: A. L. J. / E. C. J. — (Kimball) Warren — Marshall Gee — Tucker Shipper

Send: Gen. Cat. / I. C. " / Oven " / Conf. " / Specialty Book

Answering yours on — Collections — (Complaint)

WRITE CUSTOMER'S NAME FIRST

John Jones, Bucksport, has not received the five pails of Raspberry billed on

Signed W. Brown

FIGURE 69: In many an office it has been found that when a letter refers to several subjects, filing troubles often result. This form, used in the office of an unusually carefully managed concern, lessens this difficulty materially. It should be easy to apply this form with some slight variations to almost any type of business, its originators declare.

**Often letters can be destroyed in a very short time**

large concern, for example, keeps letters in the current files for only six months, and disposes of them after they have been in the transfer files a year. Another office, receiving an average of 10,000 letters a day, has practically no filing problem. Some letters are kept only two months; others that are more important are kept three or four months; but nothing is kept longer than half a year. It is the policy of this concern to satisfy its customers, no matter what the cost may be to the company. So, in the majority of cases, it would be practically a waste of time and money to keep elaborate files.

As the cited instances show, therefore, the proper length of time to keep letters is a matter to be determined solely by the conditions that govern in each concern.

**How do letters get misfiled?**

The nine sources of mistakes in filing correspondence that a middle western concern found most frequently are:

1. A letter from a regular customer is written on somebody else's paper.

2. The firm name appearing on the letterhead is entirely unlike the name signed to the letter.

3. In replying to a letter like that just described, the stenographer may have addressed the letter to the firm instead of the individual, or the individual instead of the firm, the name which she has chosen not being the one by which the correspondent is best known in the house.

4. A correspondent, for some reason of his own, has addressed his letter personally to a department head or some individual in the firm that is a big customer. In such a case nobody except, perhaps, the correspondent himself would think of calling for the letter at a later date under any name other than that of the firm.

5. A letter is addressed to the mayor of a town or some other public official. In public life, officials are constantly changing, and a letter can hardly be identified by the official's name.

6. In another letter the given name is much like a common surname, and the file clerk mistakes it for such.

7. The name of the person written to has been misspelt by the stenographer. Even a very small error makes the letter practically unfindable.

8. Several letters from different concerns are pinned together. They were probably put that way for the convenience of the person using them, though they are not really related. The file clerk, finding them so, leaves them together and files them under the name on the top letter.

9. A letter, which has no mark to show that it has been answered, is nevertheless put in the files.

Perhaps one of your clerks can do on part time what this concern hires a man to do

This firm—which happens to handle marble and granite—in order to eliminate misfiling just as far as can be, has assigned a man to run through all papers that go to the files, and mark them for the boys who do the actual filing. He is an experienced man with the firm, a bookkeeper who knows the names of all customers and correspondents. In the "one-man business" this duty might be performed by the proprietor.

It has been the experience of this concern that letters when they come to the filing department are not ready to be filed. They must first be looked over; and it is the duty of this file chief to pass the letters which can be filed at once, and later mark correctly the doubtful ones. About 90% will pass without any change, but the other 10% are subject to numerous corrections.

As a rule, a glance is sufficient to show this man whether a letter can be passed at once; and, if so, he stamps it with a rubber stamp marked "File." If there is something doubtful about it, he lays it to one side until he has gone through the pile of letters in front of him. In this way the filing clerks are not delayed, for they go ahead with the letters he has already passed.

The idea is to file letters so they may be easily located

For the special letters, the file chief takes more time, and blue-pencils them as liberally as necessary in order to secure correct filing. The nine mistakes listed are the common difficulties which he runs across—and they are difficulties that every filing department encounters more or less frequently. In each case he makes the necessary correction, so the file clerks will know where to put every letter.

Other mistakes occur, but these are the principal ones. By taking care, through the file chief, to make sure that letters are really ready to be filed before they get into the hands of the filing clerks, misfiles in this concern have been practically eliminated.

Is there a one best system for every business?

It is important to select the method of placing papers in the cabinets that is best suited to the nature of the papers you have to file. To repeat, the four methods in more or less common use are: (1) alphabetical; (2) numerical; (3) geographical; (4) subject. A variation is the decimal system, which combines the use of numbers and subjects in an effective way.

**How to choose the best plan for your business**

A more general grouping of these various kinds of filing systems would place them all under two heads: self-classifying systems and card-indexed systems. Alphabetical, geographical, and decimal systems are self-classifying, as is also the combination of alphabetical and numerical systems; while numerical and subject systems fall in the second group, and require the use of card indexes in order to locate letters in the files.

Straight alphabetical filing is simplest of all in principle, and is most easily understood by the average file clerk. Correspondence is placed in the files according to the initial letter of the correspondent's name, and the subsequent letters of his name determine the order in which his correspondence shall appear with reference to correspondence from others having the same initial letter.

**Mistakes can occur even in alphabetical filing**

The danger of misfiling, where the alphabetical system is used, largely arises from the failure of the file clerk to read the name correctly, or the selection of the wrong name, in cases where the name of the person signing the letter is different from the firm name. Usually, misfiles of the second sort can be traced easily by counting the possibilities.

Alphabetical filing is very widely used, and is probably adaptable for most concerns whose correspondence is not unusual. Formerly, it was very common to find numerical systems instead of alphabetical, but a good many business houses have found that the cost of a numerical system may be too high. In such a system the file folders are numbered consecutively, and are cross-indexed on small cards that are filed alphabetically.

**Numerical filing worked out best for this concern**

A firm of contractors has tried other systems and finds the numerical system most satisfactory of all, because of the nature of its correspondence. This concern handles large contract work, and all correspondence about a single contract is most easily found when it is kept in one place. Numerical filing handles this work excellently. All correspondence concerning the James contract can be found, say, in folder number 273. There may be letters from twenty different concerns, but if a particular letter from White and Currier, contractors, is wanted, reference to the card index shows with which contract folder the letter is filed, and it can be secured at once.

In another concern where numerical filing is used, each correspondent is given a number, and all letters from and to him are filed in a folder numbered accordingly. Indexing is essential here also, but it is felt that this additional cost is more than repaid by the certainty with which letters can be had when they are wanted.

**Card indexes are valuable adjuncts to some systems**

Subject filing also requires the use of card indexes. Such a system is generally used only where the subject matter of letters is of very great importance, and the fact that a certain letter comes from a particular concern is relatively unimportant.

Usually, several cards must be made out on each letter, in order to index it thoroughly, and this, of course, adds to the cost. Further, a thoroughly competent person must do the indexing, or it is almost valueless.

One big difficulty in subject indexing is the fact that no two persons are likely to hit on the same word or phrase to index a paragraph; and at different times the same person might select different catch phrases. Thus, reference becomes rather uncertain, unless enough index cards are made out so that little doubt remains but one of them will be chosen when the matter is referred to later.

**Care must be used when the subject system is used**

In spite of these considerations, subject filing is the only method that fits the requirements of some concerns. A variation of the method, that has been tried in different concerns and found fairly successful, is the decimal system. This is a system suggested by the Dewey classification that is generally used for filing books in public libraries. The numbers used in this classification gather together in one place in the index files all books pertaining to one subject, and also designate the location of the books on the shelves.

**Some sample classifications that may be suggestive to you**

In adapting such a system to the filing of correspondence in business houses, all matters dealt with in letters and the miscellaneous papers of management are gathered and considered in their entirety, and can very readily be divided into 10 or fewer general classes. For example, the following headings will suit some concerns:

0. Executive and Administrative
1. Finance and Accounts
2. Manufacturing
3. Selling

**When well classified this plan is effective**

4. Advertising
5. Supplies and Equipment
6. Construction and Repair
7. Credits
8. Collections.

Each of these general heads can be subdivided into not more than ten subdivisions, and so on, as far as necessary. Libraries have found it convenient to use a decimal point between every three digits, and the same applies in business correspondence.

In filing by subject, the work of the classifier naturally calls for careful attention. He must consider his subjects time and again. He must handle every item, no matter how small, which is mentioned in the correspondence and is likely to be referred to, and he must determine the ways in which each subject is most likely to arise. For instance, pig iron is usually bought to be manufactured into castings. But beef is bought either alive, cured or frozen, and must be killed or preserved, cooked and eaten. In every instance of this kind the classifier has to be very careful to provide a card in the index for the particular activities concerned with the various items.

**Here is how one tested plan is used**

After the classification is completed, an adequate index should be made, showing in alphabetical order the numbers that represent each subject in the classification.

The operation of the filing system which is based upon this classification is simple, once it is started. The drawers, file boxes, guide cards, and folders are arranged according to the numbers in the classification. If desired, both number and subject can be written on the folders, though the only reason for doing so is to aid the file clerks.

No card indexes are used. Cross-references are sometimes required when a paper refers to more than one subject. All papers pertaining to one subject are filed together, and papers pertaining to similar or allied subjects are filed next to one another. As a rule, such a system will prove too costly and cumbersome in many business houses; but it works splendidly in public libraries, and there are certain concerns where the extra cost is more than repaid by the assurance of finding again everything in the correspondence files on certain subjects.

**Perhaps the geographical system best meets your needs**

Of the more important methods of filing, only the geographical system remains to be described. This method is commonly used when the town and state where the correspondent does business is an easier way of identifying him than his name or the subject matter of his letter. In this system the guide tabs for the different states are distributed through the cabinets in alphabetical order; behind each state guide the town and city tabs for that state are likewise arranged in alphabetical order; and, finally, behind the town and city guides, the folders for individual correspondents in that town or city are again arranged in alphabetical order. So it is simple, knowing the business location of a given correspondent, to go straight to his folder.

**One example that is worth studying**

The credit department of an electrical concern which distributes nationally—in this concern the credit correspondence is kept apart from the main files—finds it useful to file correspondence by this method. One credit man in this concern may have charge of two or three or half a dozen states, and files arranged geographically enable him to have all information about each part of his territory together. If a customer in Wyoming fails to pay his bill, asks for an extension, and complains of unfavorable business conditions in his town, the credit man can refer to the folders of other customers in the same locality and find if any of them have also complained.

It would not be possible to secure this information so readily if the correspondence were filed alphabetically, unless a geographical cross-reference were used; for one customer in the Wyoming town might be with the F's, another with the W's, a third with the N's, and so on.

**Follow-up filing is a problem in many offices**

In other concerns where conditions are similar the same method of filing may give the greatest satisfaction and prove to be the best way to secure most help from the files.

Nearly every concern has more or less of a follow-up problem; and in those concerns where such a system as has just been described is not used there are two general solutions. Special conditions will determine which of the two plans it is best to use in any particular case. The first plan involves using a cabinet entirely distinct from the main files, for the purpose of keeping track of letters

**Making sure the letters will come up automatically when wanted**

which are to be followed up after a certain number of days. The letters may be placed in this extra cabinet under the date when they are to come up for consideration again. On that date they are removed and sent to the proper persons for further attention.

Another plan that has been successfully used is to send all correspondence to the permanent file. When the dictator wishes a particular piece of correspondence to come up at some future date, he places in the upper right-hand corner of the carbon copy the date desired. The file clerk automatically lists such items on a sheet of paper for that particular day, or on a card index in which the cards are filed by date. Each day the required correspondence is taken from the general files, and no separate file or folders are necessary.

**Another plan that gets the same result in a different way**

The second plan has the advantage of providing only one place in which to look for correspondence, in case it is wanted before the period indicated by the next follow-up date has expired. But the first plan has an advantage, also, in that it keeps all follow-up material together. When it is used, the letters placed on file in the special cabinet must be indexed so they can be found under the proper date if they are wanted before they are transferred to the general files.

Another problem which practically every concern faces is that often several quite distinct matters are mentioned in the same letter. In subject and decimal filing the difficulty is overcome by the system itself, but in other kinds of filing it is frequently necessary to cross-refer copiously from one folder to another; and sometimes concerns find it wise to copy extracts from such letters and place the extracts in the correct folders.

**Comfortable workers are less likely to make mistakes**

Anything which makes file clerks better able to do their work in a pleasant and willing frame of mind is helpful in obtaining right filing. The office manager of a plant in Milwaukee is convinced that the efficiency of filing in his concern has been measurably increased since he provided chairs and tables for the girls in the department, and placed stools at convenient intervals at the cabinets, so they can be seated while they are putting papers in the folders. Before, they were compelled to stand at their work from morning until night.

**How to check up on the accuracy of the files**

Another manager provided a surprise on one occasion for the girls in his filing department, to emphasize in their minds his feeling of the importance of their being neat and orderly in handling their work.

After hours, one evening, 3 impartial judges made a careful examination of each of the 12 filing cabinets in the division. The cabinets are arranged in groups of 6 pairs. One clerk has charge of one side of 2 cabinets, while the opposite side of the same cabinets are in charge of another clerk, making 12 clerks in charge of the filing cabinets, and giving a big leeway for variation as to the condition in which the work is left at night.

Each cabinet has a receptacle in which daily report books, cards to be filed, unfinished work, and all accessories are supposed to be carefully laid away before leaving the office.

The duty of the judges was to select the neatest file. Because of boxes, loose cards lying on the files, rubber bands, clips, untidy receptacles, and cards or folders not properly braced in the files, they eliminated ten cabinets. The neater of the two remaining was selected. An appropriate "Extra" was placed on the department bulletin next morning, with a crisp, new, one-dollar bill pinned to it. The winner was invited to help herself and to do what she pleased with her winnings.

**Time spent on making files effective saves money for the entire office**

The plan has been handled in a similar way from time to time on various classes of work other than filing in that office, and has proved a good way to inspire greater care in general office neatness.

All methods of this sort are helpful if they make for better filing and quicker finding. The filing department should really assist all other departments of the business. For this reason, it is well worth while giving the necessary care to selecting the one method best suited to your type of correspondence, and seeing that everything is done to make the work of filing effective.

Of course there is nothing startling or new in the filing methods just described. They are the ones generally used in the larger offices where careful studies have been made to determine the best method for that particular office. There is nothing about them to prevent their use by small offices just as they stand.

**This man tells how he saved 50% of his filing expense**

The proprietor of a business which happened to have a large correspondence made over his filing system in an unusual way, and not only saved about 50% of the filing cost, but made it possible to find letters in much less time. Here is how he did it:

"Our normal yearly volume of general correspondence filled about 24 letter-size filing drawers of standard length. There were also filed, under separate classifications, invoices, bills of lading, and quotations. One clerk gave her entire time to filing. This is, of course, a large amount of correspondence, but one beauty of the system we worked out is that it will handle any amount equally as well. Haven't you noticed that oftentimes the smaller the office, the harder it is to find letters?

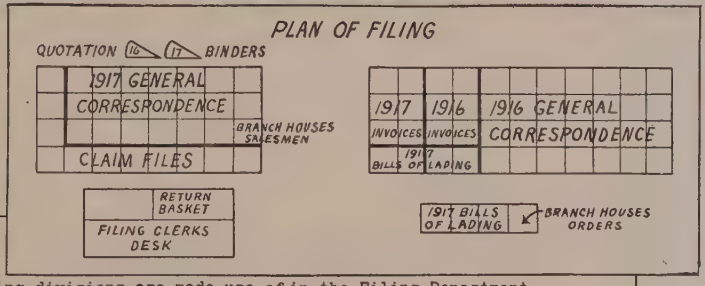
"As the first step in my investigation I established myself at the filing desk as a pupil of the filing clerk. I endeavored to learn everything that she could teach me—not only the routine work, but also the results of her observations while she had been filing. I made a detailed examination of the system used in filing each class of document. I spent considerable time actually filing and checking the work of the filing clerk, to see if her work was accurate.

**His problem seemed big, but was easily rectified**

"The system in use for the general correspondence was one with which I had not been previously familiar, and I was inclined to view it with suspicion. However, as I studied it more closely, I was forced to admit that for our purpose my old friend, the straight alphabetical system, probably offered as many opportunities for error as the one in use, and that the latter possessed many distinct advantages.

"Careful examination showed that the trouble lay, not with any one piece of equipment or any one individual, but rather with a combination of careless practices which somehow had gradually grown up.

"The investigation further showed that the files were stuffed with a mass of unimportant matter which was never referred to after it was filed; that this dead material not only took up valuable space but interfered seriously in locating important documents; that changes in the details of filing were made from time to time by the filing clerk and were known to her alone; and that practically




System of Filing

The following divisions are made use of in the Filing Department.

1 — Quotations (duplicate copies)
Indexed Alphabetically and Filed by Number in Binder.

2 — Invoices. Indexed Alphabetically and Filed by Number.

3 — Bills of Lading. Filed Alphabetically.

4 — Branch House Orders. Filed by Date under each Branch House.

5 — General Correspondence, Filed Alphabetically-L. B. Auto Index System

Each of the above divisions is further divided into 1916 and 1917

Under General Correspondence is filed everything not included in the other four divisions

The Quotation Indexes are kept beside the Binders. The Invoice Indexes are kept on the top of the Invoice Files.

The attached Blueprint shows a diagrammatic view of the files.

FIGURE 70: The worker at these files will find the letter he wants quickly. A blueprint, placed where everybody who consults the files can see it, shows how the filing cabinets are arranged; and the guide list, posted just beneath the blueprint, makes it possible for even one who is unfamiliar with the files to find any paper without delay.

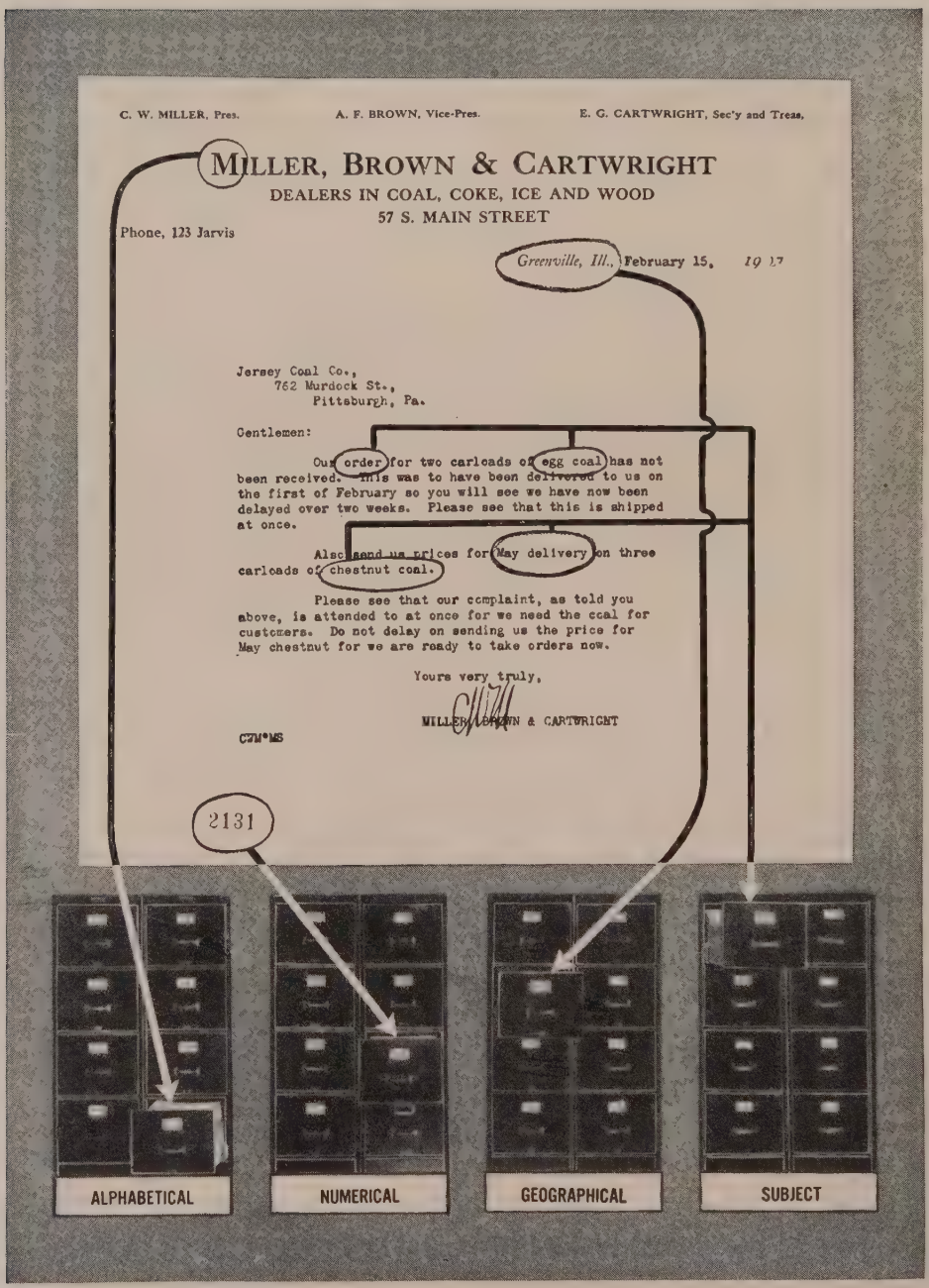

C. W. MILLER, Pres. A. F. BROWN, Vice-Pres. E. G. CARTWRIGHT, Sec'y and Treas.
MILLER, BROWN & CARTWRIGHT
DEALERS IN COAL, COKE, ICE AND WOOD
57 S. MAIN STREET
Phone, 123 Jarvis
Greenville, Ill., February 15, 19 17
Jersey Coal Co.,
762 Murdock St.,
Pittsburgh, Pa.
Gentlemen:
Our order for two carloads of egg coal has not been received. This was to have been delivered to us on the first of February so you will see we have now been delayed over two weeks. Please see that this is shipped at once.
Also send us prices for May delivery on three carloads of chestnut coal.
Please see that our complaint, as told you above, is attended to at once for we need the coal for customers. Do not delay on sending us the price for May chestnut for we are ready to take orders now.
Yours very truly,
MILLER, BROWN & CARTWRIGHT
C2M•MS
2131
ALPHABETICAL
NUMERICAL
GEOGRAPHICAL
SUBJECT

FIGURE 71: The illustration above visualizes effectively the four common methods of filing. But one letter is used as the subject here, yet you can readily see how this same letter can be filed and cross-indexed so that each subject of importance which it contains is accurately classified, and can be brought to hand quickly whenever it may be needed.

**The exact steps he took to save both time and money**

no one in the office, aside from the filing clerk, had a comprehensive idea of where or how anything was filed. With only one regular filing clerk in the office it may readily be seen how important it is for others to know where and how to find material when the filing clerk is away from her post.

"Here, then, was our first step: All of the filing drawers were plainly labeled to show their contents; so were the binders for quotations and the indexes used for them and for the purchase invoices. A printed card explaining the correspondence filing system was hung directly over the correspondence files. A basket was put on the filing clerk's desk, in which were to be placed all papers returned for refiling—that is, those which had once been filed but had been removed for examination and which were now to be replaced in the files.

**This photograph explains the system**

"A simple sketch showing the various filing devices, and lettered to show the contents of each section, was then made, as shown in Figure 70. Enough blueprints were struck from this drawing to supply each one in the office who might have occasion to consult the files, and one was given to the filing clerk as her plan from which to work. To each blueprint was attached a typewritten sheet giving, in words, the information shown graphically on the drawing.

"By these means everyone was given enough accurate, concise, and easily understood information to enable him to find without difficulty any paper he might want if he found it necessary to look for it himself.

**Some tested rules for the filing section that prevent difficulty**

"A set of rules to govern the handling of all correspondence was drawn up and these rules, which follow, were incorporated into a house bulletin over the manager's signature. The first five rules are for all of us, the last five for the filing clerk and anyone else who may find it necessary to remove letters from the file in her absence.

1. Retain nothing in your individual filing case except the personal or other papers to which no one else has occasion to refer.

2. Do not have filed unimportant letters or data which have served their purpose. Requests for prices or catalogs, acknowledgments of catalogs, and so forth, only encumber the files.

3. Return promptly to the basket at the filing desk all letters or folders removed from the general files for examination. Be sure

**These rules should be effective in any office**

to replace in a folder all the correspondence it contained when you received it.

4. When possible have the filing clerk procure letters from the files for you.

5. Do not return letters or folders to the filing cases. This is to be done by the filing clerk exclusively.

6. Deliver a complete folder to anyone wishing a letter unless the letter is in the miscellaneous folder, in which case deliver only the letter requested.

7. When a complete folder is removed put an "out" guide in its place, making the indicated notations on the guide.

8. When a letter is removed from a miscellaneous folder put an "out" guide in its place, making the indicated notations on the guide.

9. Check up once a day on all letters or folders which have been out of the files for 48 hours or more.

10. File correspondence from the "return" basket in the proper folder according to date.

**Usually it's not difficult to pick out the one best plan**

"The effects of observing these suggestions were immediately noticeable. Although no accurate count was kept, I think it would be safe to say that the volume of correspondence sent to the filing desk was reduced at least one half; besides, the work of the filing clerk was so lightened that she has since been able to assist materially in other departments."

No matter how well your files are kept it always takes a few minutes to find a letter that you call for. Sometimes these few minutes mean lost dollars, to say nothing of tempers.

A busy executive overcame this trouble in what, you'll agree after you read this, is a most common sense and obvious way. He says:

"This is a filing plan that suits me down to the ground. It will suit you, too, if you do the same general kind of work I do, or have about the same problems when it comes to finding 'that document' in a hurry.

"What is my work?

**Here's a mighty simple plan that anyone should be able to use**

"It is of a non-routine nature. It is always different. No steady stream of reports and correspondence flows across my desk, the same day after day, to be handled by 'referring' it to 'the proper party' or answering by dictated letter. It runs, instead, eternally along new paths. First, there is some condition in the business, not yet covered by routine or ruling, that needs to be

pruned or watered. We discuss the matter. We reach a certain unanimity as to the right kind of pruning or watering. Then these remedial measures must be translated into detailed procedure and concrete words and acts—that's my work.

**"Right where I can lay my hand on any paper I want"**

"I expressly abstain from stating the name of my job. The minute I do that every man whose job has a different name concludes that my plan would not do for him. In reality, it is for anyone whose work, in essence, is promotional and involves masses of hodgepodge memoranda, letters, blueprints, schedules, reports, notes of conferences and the like. It is for the man who frequently 'wants what he wants' out of this mass instantaneously to clinch his point in the eager talks so characteristic of uncharted work. It may be a complaint from a consumer; it may be a clipping from the morning's news; it may be a rough drawing by one's favorite artist; but one wants it quickly! One needs it badly.

"Here's the plan: the moment I can get any paper or document off my desk and into a drawer, I do so. I use only one drawer. Everything is put into it, one thing on top of another. This is no sorting, no classification. In the drawer it goes, the latest always on top, to be covered in its turn by the next paper, and so on. When I want to get any recent paper, I simply look in this one drawer for it. Evidently, the more recent it is, the oftener I shall want it—and the more recent it is, again, the nearer the top it is, and the easier to find.

**Simplicity and common sense made this plan effective**

"That is the first half of the system. The basis is not alphabetical, nor subject, nor nature of document. 'Recency' is the sole basis. By simply laying one thing in one drawer, hour by hour, day after day, you automatically insure that the oftenest wanted paper is the one nearest the top and therefore easiest to find. You 'file' as you go along. Whatever you want you will find in the drawer. You always get it. You get it inside of 30 seconds; often instantaneously. There is no pressing the button for the 'filing clerk,' no wait for her to return, dismayed and fearful of rebuke, to report that the paper cannot be found but 'the boys are looking for it; they think Mr. Drew had it, but he is sick today.' That is all eliminated.

**"Recency" is the basis of filing here**

"But what happens when this magic drawer becomes full to overflowing? When that happens, and it happens regularly, of course, I take out the entire mass and lay it on my desk upside down. The oldest pieces are now on top. I turn over each piece in its turn and one glance tells me whether it should remain in the drawer or whether by the lapse of time it has become 'dead'—and it is wonderful how many papers, in constant use one week, snatched out and exhibited time and time again, become later mere antiquities because the work they represent is done and disposed of.

"The trashiest of the 'dead' pieces go in the waste basket. The rest—those that may possibly come to life some day or be wanted in connection with another task—are filed—this time in the ordinary and accepted sense of the word 'file.' They go either into the general office files, if they belong there, or they go into my own private subject file if they are such that no other department could or would want them.

**How this plan was transplanted from one business to another**

"So I go on, working from the bottom up, until the newness and recency of the pieces I encounter warns me they are likely to be wanted any moment because they concern work still unfinished. There I stop, and restore the now much-reduced pile to its drawer, to be the foundation of today's and tomorrow's and next week's accumulations.

"I got this system from an advertising expert, who is one of the shrewdest and cleverest judges of office methods I ever met. He has used the method for years, and it works perfectly. I never knew him to be flurried or hurried in laying his hand on any paper. The precise document he needed seemed to appear in his hand as though it had materialized from thin air. He would simply reach to the one drawer and draw out what he required while he was talking about it.

**Laziness cannot be the basis of a worth-while filing plan**

"A good many business men—retailers and other heads of businesses—unconsciously carry out the first part of this system. They let papers accumulate in piles from day to day. Very much so! But this is planlessness rather than plan. These men allow papers to pile up unsorted, not because they have any method in so doing, but merely because that is a lazy man's way. When

FIGURE 72: This photograph illustrates the filing plan described on page 147 in the words "Inside of 30 seconds, I have the paper I need when I want it. . . . I don't have to call a clerk to hunt for it. . . . Out of the mass it comes instantaneously to clinch the point in the eager talks that are so characteristic of uncharted work."

FIGURE 73: Perhaps a variation of this "easy-go-round" can be put to work successfully in your office. It cuts down the time taken by letters from the desks of the workers to their proper place in the files, and reduces the labor necessary to get them there. The young woman who uses it declares it is "just right" and speeds up the work.

FIGURE 74: Sometimes the deep drawer of a desk becomes a sort of rummage chest. Not so with this man. He keeps his file of important correspondence in it ready to hand.

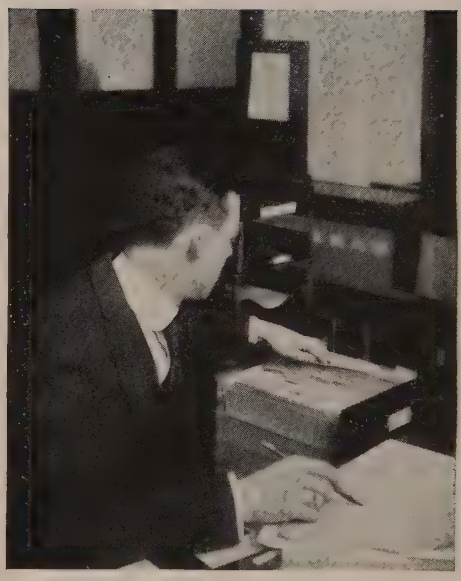


FIGURE 75: With two letter-size file units beside his desk one executive keeps his important correspondence handy at all times. The file drawers are at right angles to the desk.

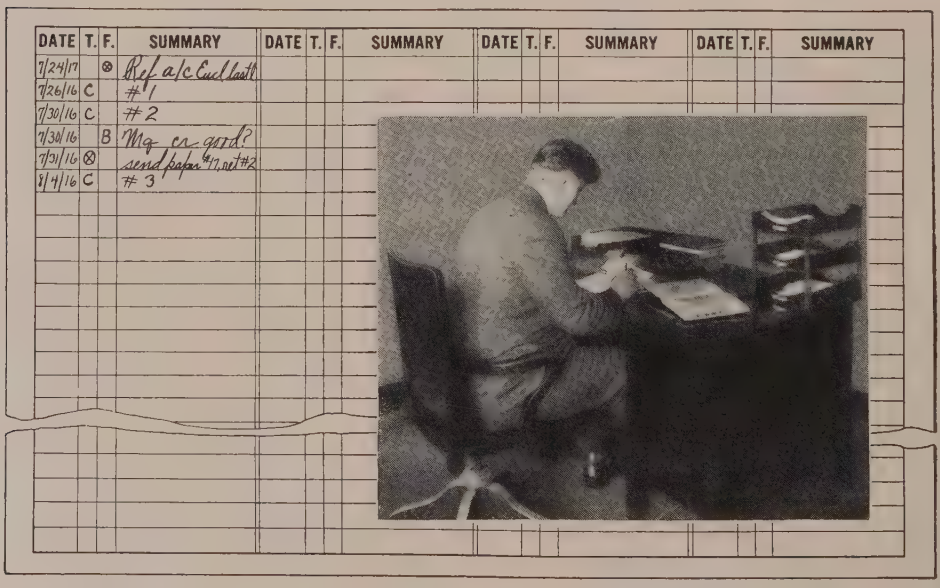

DATE T. F. SUMMARY
7/24/17 ⊗ Ref a/c Eucl last
7/26/16 C #1
7/30/16 C #2
7/30/16 B Mg cr gard?
7/31/16 ⊗ send papers #1, ref #2
8/4/16 C #3
DATE T. F. SUMMARY
DATE T. F. SUMMARY
DATE T. F. SUMMARY

FIGURE 76: Here is the method of filing used in one office. The correspondence is summarized on cards, like the one shown above, by a clerk who receives it before it goes to the files. The front of the card (not shown) carries details of the customer's contract and the reverse (shown) supplies an abstract of the important correspondence.

they want anything from the heap, there is a hurried, scrambling search, with subdued cussing perhaps, but the desired document seldom is found.

**Ten years of use has failed to develop an objection to the plan**

"The real gist of the method is the periodical overhauling of the pile with systematic disposition of dead or obsolete papers in ordinary files.

"I sometimes think my method has a kind of philosophical basis. If we look upon a file as a kind of mechanical memory (and sometimes it is called so), then the ideal basis for filing would be that of the human memory—and we all know that facts are filed in our brains mostly by recency. We remember today's events best, yesterday's less well, and so on.

"I have used this system for ten years with infinite saving of nerve wear and tear. But, as stated, I do not think the recency plan of filing would appeal to a general freight agent of a railroad, nor to a government official, nor to any other executive, important or unimportant, whose work is essentially routine and interdepartmental."

**A device that speeds the mail from desk to file**

There is an interesting piece of equipment that speeds up the work of the file girl. It cuts down the time that a letter spends between your desk and its proper place in the file.

This device, which is shown in Figure 73, is constructed so as to allow the clerk to sit at her desk, and, without moving from her position, she can revolve this "easy-go-round" and reach any card in any of the twenty-four units. It saves her quite a bit of time in the course of a day's work.

This "easy-go-round" is pivoted in the center, and operates on small, rubber-tired, ball-bearing bicycle wheels. These permit it to revolve easily—practically at a touch of the hand. The device is relatively simple in construction, and can be built without much difficulty by an apt workman.

Each box in the "easy-go-round" has a large metal number on its side, which indicates the department. All the cards for any one department are filed in the same box.

One girl can keep these records, and for the wholesale house where they have been used they have proved unusually helpful. They hold the purchases of standard articles under close control.

**The general file is the place for documents**

"The personal files of many executives," says a man prominent in the advertising business, "require altogether too much of their time. Unless they watch themselves carefully, they are apt to do work that they could as well delegate to their clerks. We have eliminated this in our office. Our employees are instructed never to hold in their personal folders anything that should go to the general files.

"In this way those folders keep always at hand and immediately accessible all data and material on pending and uncompleted jobs that a man wants to have before him when he takes up a particular piece of work. Individual folders within the folders care for subclassifications as far as necessary—within, of course, the limit of capacity of each. The folders form a current file of items pending, and the executive's tickler cards are really a complete index to the material they contain."

**Two plans for keeping papers handy**

Two methods used by two executives in different offices for keeping their important papers handy are pictured in the photographs on page 150. In the illustration at the right is a department head in a publishing house; the other man is copy writer in an advertising agency.

The advertising man had the fittings of the deep drawer in his desk removed, and had notched strips an inch and a half wide nailed inside a little below the top. The notches are three eighths of an inch wide and a quarter inch deep. The space between notches is five eighths of an inch.

The folders he uses are ordinary manila ones of letter size; but a strip of thin sheet metal is crimped over both upper edges. This strip projects a quarter inch beyond the width of the folder on both sides, so that it holds the folder in place inside its own notch.

**Always in the same place ready for use**

In this way each folder is kept in the same place all the time. The folders are separated so far that their labels can easily be read without any handling. To facilitate still further this instantaneous availability, the executive has each file cover labeled both front and back. Then when the drawer is fully extended he does not need to slide his chair back to see the label; he identifies the folder, in that case, by the label on its back. The notched strip is also labeled at each folder, so that a torn

or lost marker need not cause delay in finding a file cover.

**How to keep personal files in your desk**

The plan of the department manager in the publishing house is somewhat different, although it is similar. He keeps two letter-size file units beside him. He first tried having them alongside his desk, but the long reach was an inconvenience. When he rearranged it so that the drawers ran at right angles to his desk drawers, he could not have both open at once.

By placing the file units beside his chair, he got away from both these difficulties. In their place arose the inconvenience of reading the labels. He turned the folders around to run lengthwise of the drawer, and now the arrangement is thoroughly satisfactory. The executive can now work at his files as easily as at his desk drawer.

It is not always the fault of the files when a much-wanted letter can't be found. It may be in someone's desk. Here is a good way to overcome that chance:

**Are important papers buried in your desk?**

Once every six months or so the auditor of a paint manufacturing concern has occasion to visit the different branch houses of the firm. He has a standing order that, when he calls, the contents of each desk must be taken from the drawers and placed on top of the desk.

The old-fashioned roll-top desks, he believes, were burying-grounds for many wanted papers, and so they were succeeded by flat-top desks. The many drawers of a flat-top desk, he feels, may invite carelessness. This unusual rule acts as a preventive and a remedy. The official makes the rounds of the offices and glances over the contents displayed. This causes unnecessary papers to be sent to the files or destroyed before the "exhibit" takes place. No member of the staff is excepted from the rule.

## CHAPTER XI

# GETTING A PROFIT FROM A BUSINESS LIBRARY

**Why it is important to get other men's ideas**

HERE is a letter from Australia. "I was sitting in the office of Robert Laidlaw, chief proprietor and manager of Laidlaw Leeds, the big mail-order house in Auckland, New Zealand, and I noticed on his book shelves numerous copies of SYSTEM, the Magazine of Business. Later, when motoring, he told me the peculiar importance SYSTEM had in his career.

"He was 19 years old, and a commercial traveler for a hardware house by the name of Laidlaw, Gray and Company, of which his father had formerly been a partner. Even then he read such business literature as he could get.

"Among the advertisements in SYSTEM, he found a description of one of the 'how' books published by SYSTEM—this one was on how to sell by mail, and he sent for it. The study of the book gave him some big ideas which could be applied to local conditions, although the specific instances in the book did not interest him particularly. From those ideas developed the mail-order house of Laidlaw Leeds, which now occupies a six-story building.

**The office library is one of the best ways to keep other men's methods ready for use**

"Mr. Laidlaw from the time that he secured that first magazine, subscribed for SYSTEM, and has been a close student of each issue, taking advantage of all the new ideas described. He also subscribes for eight copies of SYSTEM for his different department managers."

Many offices, and a lot of them by no means large, have found the business library a source of profitable ideas for executives and employees alike. Technical knowledge in an easily accessible library is necessary for consulting engineers and chemists and other specialists.

**How to build up a library**

Several public utility companies have maintained special libraries for many years, in order to keep their engineers and technical staffs acquainted with what is being published in their several fields.

In building up a business library, these concerns have found it wise to begin by placing it in charge of some person experienced in up-to-date library methods. It is seldom wise to attempt the purchase of a number of books all at once. The best libraries grow with the business. A collection of books alone usually cannot make a library useful.

A central location has been found an important feature. To compel users to travel to some inaccessible room simply because that room happens to be available usually reduces the number of times the library is used and, of course, seriously impairs its working effectiveness.

**Should the library be partial to any one branch of the business?**

Furthermore, if the library is attached to any one department with which it may seem closely allied, its viewpoint is often partial, and it lacks the scope essential to make its service worth while to the business as a whole. If the library is to show any real earning power, it must serve fully and impartially the heads of all departments, executive officers, technical experts, and others. And in this work it must be free of interdepartmental jealousies and stand on an equal basis with all, so as to cooperate with and assist everyone.

Nearly every issue of a technical or trade journal contains data of practical value to some particular business. This is a fund of valuable information and, if not carefully preserved, classified, and filed for future reference, may cause an actual loss to the company.

**Information, to be of value, must be quickly available**

New technical books and magazine articles of merit, written for the enlightment of business men and their employees, are being published daily. Yet few men can find the time to examine them during business hours. It is manifestly impossible for the average executive to read regularly even half a dozen periodicals a month unless his reading is done on a prescribed system and references are made to the items which pertain to his work. The search through old copies of magazines for articles that may be of value in the solution of a problem is almost useless unless some guide is furnished.

Magazine American Machinist

| CHECK HERE | | SEE ARTICLES ON ON PAGES BELOW | SEE ADVERTISEMENTS ON PAGES BELOW |
|---|---|---|---|
| ✓ | Johnson | 5–25 | |
| | Hay | 13 | 14-3 |
| | | | |
| | | | |
| | | | |
| | Williamson | 37 | 99–129 |
| | | | |

FIGURE 77: Here is the circulation label that goes on every magazine received in the library in one office. A librarian who marks articles and advertisements in magazines and newspapers for employees to read, in reference to their work, can make his or her desk a veritable "idea factory." She also clips and files the more important articles.

**Index Request**

Mr. _____ wishes you to index articles in the January issue of Engineering News as follows:

Subject Hydro-electric Plants Page 116

Each of the following men desire to read through this magazine. It is to the interest of all that each finish with it in his allotted time. Send on promptly to the next man in turn.

| Name | From | To |
|---|---|---|
| Mr. Henry | Jan 1 | Jan 4 |
| Mr. Alsacre | " 5 | " 8 |
| Mr. Homer | " 9 | " 12 |
| Mr. Adams | " 13 | " 16 |
| | | |
| | | |

Mr. Adams Please return to the Indexing Department

Subject Hydro-electric Plants
Title of Article Putting the Deschutes River in Harness
Author L. M. McLean
Appeared in Engineering News
Issue of January File No. 5

FIGURE 78: When any executive in a western office wants the office library to preserve and keep handy for reference an article from a periodical, he sends an index request like this one to the librarian. The insert to the left on the card shows the circulation label with instruction, which is attached to all the magazines received in this office.

**Results one man gets from his library**

One firm which expected to put up a new building, had good ideas clipped from magazines for more than a year before construction started. These clippings were filed under the name of the feature they treated of.

One member of this firm says: "This sorting rack, placed as part of the dividing line between the mailing department and the general offices, is one of the results. Since our mail for individuals is likely to be rather bulky, we changed somewhat the idea we got from a magazine. One article described a rack on the 'incoming mail' table, with narrow vertical divisions in which the sorting clerk places letters and department notes to the various men.

"We have, instead, compartments that run clear through the rack. The incoming mail is sorted into the respective pigeonholes by the man who handles this work on the mailing room side of the rack. On the office side of the rack the letters are taken out and stuffed into the delivery folders for the boy. It saves us lots of time in handling the incoming mail."

**How magazines may be circulated effectively**

In order to convert its files of old periodicals into a working library, one corporation reorganized its haphazard way of handling them. Each of the 43 department heads—superintendents, engineers, electricians, clerks, chemists, purchasing agent, sales manager and others—was asked to prepare a list of the magazines which contained information helpful in his particular line of work. Sometimes several department heads requested the same magazine. An alphabetically arranged list of publications was prepared. The departments which desired the publications were also noted. When more than six men called for the same magazine, two subscriptions for it were entered.

**Routing the magazines**

When a publication is received at the office, a red label (Figure 77 on page 156) is attached to its cover. On this label the clerk inserts the names of the individuals to whom the periodical is to be referred, and the dates when it is to be forwarded to the next man on the list.

Four days is allotted to each man on the list. This time limit prevents delays and insures attention to every publication during its brief stay in each office. The schedule is arranged so that no man has more than two magazines at one time.

| SUBJECT | Paint | FILE NO. 44 |
|---|---|---|
| AUTHOR | TITLE | ISSUE |
| Wilson, L.C. | What It Pays to Know About Paint | Factory January 1915 |
| Ahrens, Y. | Spreading Qualities of Paints | Mfr. + Wholesaler March 1915 |
| Johnson, E.A. | How Not to Use Paint | April 1915 |
| | | |
| | | |
| | | |
| | | |

FIGURE 79: Reproduced above is the simple index card in everyday use in the business library of the progressive western firm. It has been found effective in every way and the value of the library has greatly increased since its introduction. Knowing what the business library contains is necessary to getting the most benefit out of it.

| STATISTICAL DEPARTMENT | File No. |
|---|---|
| Information Re: | R RATES (NO.1) |

| TITLE | FILED | NO. |
|---|---|---|
| Data in connection with Lighting Rates | B.R. | 931-2 |
| Basics of Multiple Rate Systems | Bul. | 17 |
| Some Notes on Electric Rates (R.S.H.) | Bul. | 216 |
| Real Theory of Real Electric Rates (R.S.H.) | D.F. | 29 |
| Discrimination in Central Station Rates | D.F. | 39 |
| Data in connection with Refrigeration Rate | E.F. | 19 |
| State Elec. Assn - Report on Rates | Clip. | 110 |
| | | |
| | | |

(Use Typewriter)

Statistical Depart

Kindly return to

Signed

FIGURE 80: On 4 by 6 cards like the one reproduced above, helpful data from periodicals are indexed in one office. Note particularly that all data on any one subject are indexed together—that on "rates" in this instance. This system has had a thoroughly practical test over a period of several years and has fully demonstrated its effectiveness.

Indexing magazine articles for future reference

Only those articles, of course, are read through which pertain directly to the work of each individual or department. If the department head desires to index articles for reference, he simply indicates them to his stenographer, who fills in an "Index Request" (Figure 78 on page 156) and sends it to the indexing department, where the notations are transferred to a 4-by-6 index card (Figure 79 on page 158). These cards are classified according to the various subjects of interest to the 43 departments—accounting, advertising, business efficiency, engineering (in its various divisions), chemistry, mill practice (in its different phases), purchasing, safety, selling, shipping, traffic, and so on.

Why an index is necessary in the library

These index cards are placed in the general card file. Each department head who has requested the indexing of the article receives a duplicate card which is put in a reference file in his own office. Thus, when a knotty problem comes along he has merely to refer to his own index to be able to make a request to the clerk in charge of the main file for the magazine he desires. If he fails to find the desired subject in his private index, he still has recourse to the main index, where the same article may have been filed at the request of another department. Or he simply advises the indexing department to send him a complete list of all articles and books which deal with the specified subject.

To this indexing department also come all catalogs and announcements of technical book publishers. Books are purchased on the approved requests of department heads, and are indexed with the magazine articles in the proper department indexes as well as in the main index.

These books are all covered and lent to any employee who desires them, as in any library.

This test proved the library's value

A test of the scope of this service was recently made by the engineering department when it asked for all information on hand dealing with electric furnaces. It received six books and 146 articles from American, English, and French papers.

The head of a small manufacturing company who says he can't afford not to know what the other fellow is doing, calls the attention of his employees forcefully to articles that they should read. He finds that sometimes

**Getting your employees to use the library**

a foreman or other employee will feel that he is too busy to read, unless he is pushed to it.

To get their attention this manager sends a "blue note" with the magazine. Here is what he says in one of them:

> C. J. K.
>
> September SYSTEM will reach your desk shortly. I wish particularly for you to read the article "How I Pick Men" on page 205.
>
> There are a number of other articles bearing on the various phases of manufacturing which I think it would be well worth your while to read. I do not think that an organization as a whole gets nearly enough of these outside slants, a knowledge of which would naturally broaden our viewpoint.

**Here's a good plan for passing magazines around**

"I went into the office of one of my department heads the other day," says the president of a western concern, "and found that a huge pile of magazines and trade papers had collected in his receiving basket. Most of the magazines were recent issues that had not yet circulated among the other men who were on the list to receive them. When the office boy strained to lift the basket containing these magazines, the idea struck me pretty forcibly that we were paying a maximum amount of money for subscriptions and were getting a minimum of good from the expenditure. No doubt other concerns have experienced the same difficulty. I believe the method we finally decided to use will prove valuable in other offices.

"We revised our method of distributing the magazines. Today we get just as many as before, but we use every magazine to the best advantage and make the information it contains work for us permanently. A great deal of information is contained in every issue of each paper. The men want to get it. But they have no time to go through a dozen or twenty papers every month and glean all the material these contain. Our previous experience showed us that setting a limit on the time a man could keep a magazine did not prove very effective. So we adopted another plan. Instead of asking every man to read twenty papers, we asked twenty men each to read one. A man has plenty of time to read one paper thoroughly, from cover to cover. He might perhaps read two

My dear Miss Marks:

Do you have trouble with grammar in your stenographic work? Most of us are puzzled by prepositions and verbs at some time. Mr Scott in his

BRIEF ENGLISH GRAMMAR

helps solve some questions that we are always asking. Another good book along the same line is Ross's

BUSINESS ENGLISH

These books are both new additions to the library.

Dr. Richard C. Cabot has given us in his book

PRESCRIPTIONS

the essence of the lessons he has learned in a long and useful life. It is a little book that one can carry to read on the car, but between its small covers a flood of inspiration awaits you.

Among our new fiction books are several that will appeal to you.

LITTLE MISS GROUCH by Adams

is a good summer travel story.

THE FREELANDS by John Galsworthy

is an English story. The reading of this book cannot but increase your vocabulary, for Galsworthy is a master of English diction.

Yours cordially,

House Librarian

---

Please send me the book entitled

_____

If this book is not in, send me one similar.

_____ (Name) _____ (Dept.)

FIGURE 81: Merely to maintain an office library often is not enough. One concern now sends out letters like this one to employees from time to time with excellent results.

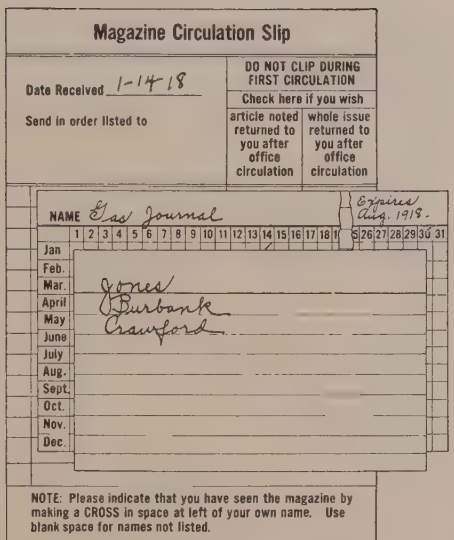

Magazine Circulation Slip
Date Received 1-14-18
Send in order listed to
DO NOT CLIP DURING FIRST CIRCULATION
Check here if you wish
article noted returned to you after office circulation
whole issue returned to you after office circulation
NAME Gas Journal
Expires Aug. 1918.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 26 27 28 29 30 31
Jan.
Feb.
Mar.
April
May
June
July
Aug.
Sept.
Oct.
Nov.
Dec.
Jones
Burbank
Crawford
NOTE: Please indicate that you have seen the magazine by making a CROSS in space at left of your own name. Use blank space for names not listed.

FIGURE 82: The card above shows the subscription expiration date, and the publication date; the large slip is attached to the magazine during the time it is in office circulation.

## THE PRINTING MAGAZINE

| DATE OF ISSUE 1918 | READ | FILES | PRICE CUTTING | FORM LETTERS | MAILING LISTS | DEPARTMENT ORGANIZATION | CLAIM STORES | AGENCY SERVICE | TYPOGRAPHY | PAPER | SALESMEN |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/7 | 1/9 | 1/9 | 14 | | 32 | | 5 | | 16 | | 3 |
| 1/14 | 1/17 | 1/17 | | 8 | 3 | | 12 | 7 | | | |
| 1/21 | 1/25 | 1/25 | 18 | | | 9 | 3 | | 14 | 5 | 15 |
| 1/28 | 2/1 | 2/1 | | 7 | | 3 | 4 | 5 | | 18 | |
| 2/4 | 2/8 | 2/8 | 3 | 5 | | 11 | 7 | | 8 | | 13 |
| 2/11 | 2/13 | 2/13 | 16 | | | 3 | 5 | | | 2 | 4 |
| 2/18 | 2/21 | 2/22 | | 13 | | | 23 | | 9 | | |
| 2/25 | 3/30 | 3/30 | 7 | | 48 | | | | 34 | | 23 |

FIGURE 83: This index card might be called an "idea storehouse." In one concern it is used to index and classify by subject all articles in magazines which the office library receives. It's a practical plan with a practical aim. It also aids in determining what magazines are of the most service to the company and eliminates the undesirables.

FIGURE 84: Here's an example of how one salesman gets his reading done "in between." He tears articles from magazines and carries them with him for reading in spare moments.

FIGURE 85: This two-section book case houses the library in a one-man business and its owner says he uses it every day for reference. No business is too small for one.

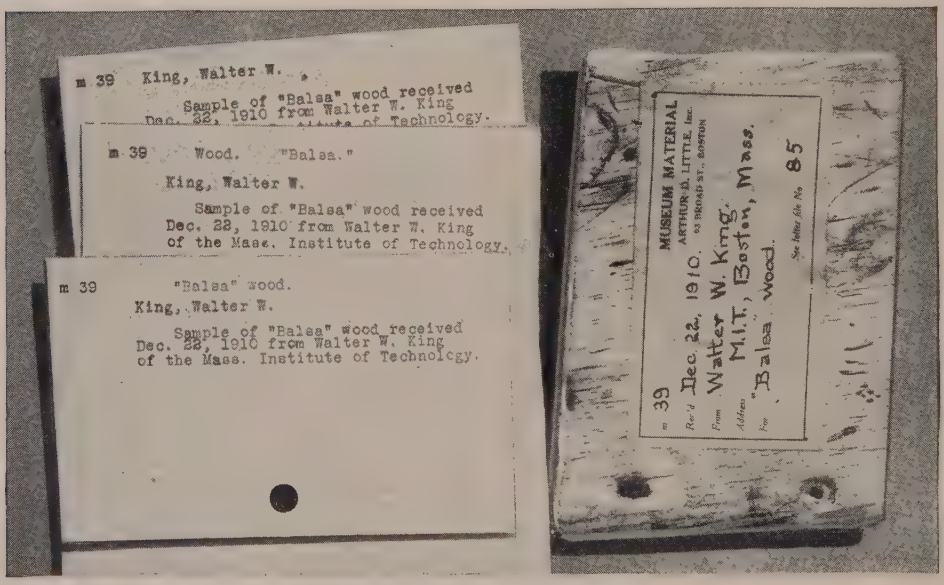

m 39 King, Walter W.
Sample of "Balsa" wood received
Dec. 22, 1910 from Walter W. King
of the Mass. Institute of Technology.
m 39 Wood. "Balsa."
King, Walter W.
Sample of "Balsa" wood received
Dec. 22, 1910 from Walter W. King
of the Mass. Institute of Technology.
m 39 "Balsa" wood.
King, Walter W.
Sample of "Balsa" wood received
Dec. 22, 1910 from Walter W. King
of the Mass. Institute of Technology.
MUSEUM MATERIAL
ARTHUR D. LITTLE, Inc.
93 BROAD ST., BOSTON
m 39
Rec'd Dec. 22, 1910.
From Walter W. King.
Address M.I.T., Boston, Mass.
For "Balsa" wood.
See letter file No. 85

FIGURE 86: The purchasing agent of one company didn't know what to do with a lot of samples he had received. Someone suggested that the library take care of them. No sooner said than done, and now every department in this business inspects the "museum" in the library and picks out just the style and grade of supplies it wants.

or three. But we make it a point to give him at least one paper each month—the same paper every time—and he is made responsible for reporting to us whatever it contains of general interest to our company.

**Maintaining general office interest in reading**

"In order to get the men thoroughly in harmony with our plan, we make it a point to select for each man the trade paper covering the particular field in which he is interested. The man who deals with the textile trade, for example, receives the journal covering the textile industry. Power salesmen get the power journals. Advertising men receive the advertising periodicals. These men, of course, could receive other magazines; but we feel that, since they are devoting their energies to a specific branch of the business, they are vitally interested in everything pertaining to their specialty. As a matter of fact, we find that they read thoroughly the particular magazine or magazines assigned to them for the good they get out of them and for suggestions they can adapt to their daily work.

**Magazines are not of much value without an index**

'But simply having files of magazines did not do us much good. We referred to them occasionally, it is true, but when we wanted an article we usually knew only that it was published in such and such a magazine about such and such a month. Each individual stored up in his memory a certain portion of valuable information he read, remembered what he could, or made private notes in his data book; but no one else benefited. This suggested the filing of articles for future reference. The men were instructed when reading magazines to give every article of merit a subject title in the margin, and call attention on the circulation slip to the page of the marked article.

"Thus an article dealing with the melting of brass would be captioned 'brass melting,' or a particularly good article on letter writing or office systems would receive an appropriate caption.

**Assembling all information on one subject**

"When the periodical containing the marked articles was returned to the office, the clerk in charge clipped the entire article from the magazine and filed it in a folder devoted to clippings under the same general title. The name and date of the magazine was indicated. This clipping file was indexed on an alphabetical card file

**This plan takes only a few minutes a day**

listed by subjects. Every time a new article appeared on the melting of brass, for example, it was added to this card and filed in the general folder marked 'brass melting.' In order to be able to find these folders quickly, they were all numbered and filed numerically. Then, in looking up a subject, the card file was referred to and the card showed the number of the folder in the clipping file. In folder number 35, for example, we would find all articles on the general subject of brass melting.

"It takes only a small amount of the clerk's time each day or so to clip and file articles. At the end of each month a list of all articles taken from the trade papers is put on the bulletin board to acquaint everybody with what has been added to the file. In this way everyone in the establishment can get the best from the current periodicals—promptly, too—by going to the clipping file for the articles that interest him."

Miscellaneous papers, reports, booklets, bulletins, and clippings from papers and magazines present a difficult problem for the librarian. The information that any business can secure from these sources is invaluable; yet the difficulties connected with filing such various-sized papers, and finding them again when they are wanted, often prevent firms from getting most successful use from them.

**Remaking a library**

These difficulties were faced by an eastern concern. The manager found that the speed with which he got information from the library very largely depended on how clear the librarian's memory was as to where she stored the particular papers which contained the facts. In order to improve this lax method, he devised a comprehensive filing scheme that has proved thoroughly successful.

His first step was to divide the files into five distinct divisions, as follows: book reports, documents, the envelop file, bulletins, and clippings.

The book reports are in looseleaf form. Whenever possible, reports and data are now written up on standard-sized sheets. Whenever information is required from other departments, a note is sent requesting the information, and enclosing a printed looseleaf sheet (Figure 80 on page 158). These sheets are numbered and when they

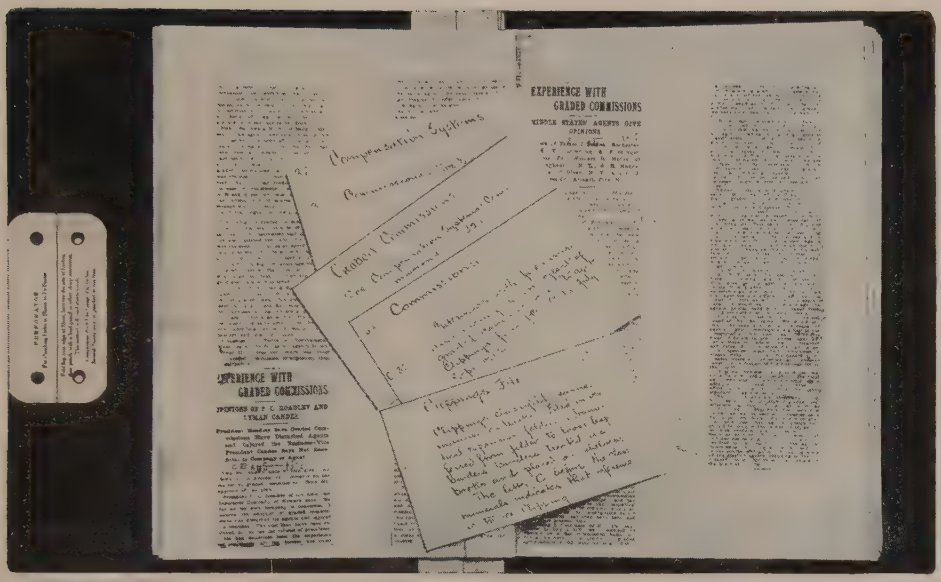



FIGURE 87: Yes, it's nothing but the old-fashioned scrap book, but as kept in one library it's mighty valuable to everyone in the business. Articles of special interest or information from newspapers or magazines are clipped, pasted, and indexed, and there they are, always ready for use. It forms a valuable addition to most any business library.

FIGURE 88: This scene looks like a comfortable afternoon at the club, doesn't it? It isn't, though. It's a corner in the library of a progressive concern and the man is one of their employees, doing some helpful reading and "taking it easy" at the lunch hour. Conveniences of this sort generally increase the interest of employees in their work.

FIGURE 89: Here's a view of the librarian's office in a concern—not so large either—located on the Pacific Coast. These two girls have entire charge of the library. They do all the indexing, filing, and circulating. "Thousands of dollars wouldn't buy this library," said its president, "I can't begin to calculate the value it has been to the business."

are completed the department files them consecutively in looseleaf binders. Most of the data in the statistical department is on file in this form.

**How about the odd-size book and papers?**

The document file is designed to care for papers that are too large or too small to be filed in the looseleaf books. It consists of a set of document file drawers, taking 4¼ by 9-inch envelops. These envelops are numbered in consecutive order. Information is put into each envelop, regardless of what subject it may concern, until the envelop is full. A list of the subjects is written on the front of the envelop, and each enclosure is given the same number as the envelop itself.

**Special files for special sizes often are necessary**

In cases where there is a large amount of data on the same subject, or in connection with the same report, written on various-sized sheets of paper, the envelop file is used. It consists of a regular vertical letter file equipped with cap-sized envelops numbered consecutively. When the sheets are filed a list of the contents is written on the front of the envelop, and each enclosure is given the same number as the envelop containing it. This file is also used for blueprints or other papers too large to be filed in the document file.

The bulletin file handles small printed books, or bulletins. This file consists of a set of drawers about a foot square, in which the bulletins are filed in order as they are received. Each bulletin has a number printed on the front cover in blue chalk. The labels on the outside of the drawers show the numbers of the bulletins which the drawer contains.

**Why a clipping file should be part of the library**

The clipping file consists merely of a looseleaf scrap book, each leaf being numbered consecutively as it is inserted. In this book are pasted all clippings from the various publications that are likely to be of value.

After the physical handling of data had been thoroughly systematized in this way, a card system was used to index the material contained in the files for immediate reference. All of the papers on file were classified so that all information on one subject was given in one place in the index. In doing this the department head went through all the papers on file and dictated the titles of the papers and reports and the various classifications under which they were to be indexed.

**One plan for indexing that is effective**

The cards were written up as shown in Figure 80 on page 158, there being a separate classification for each branch of work handled in the department. White cards were used, except where the name of a company or individual was the classification. Then a salmon-colored card was used. Each card gave the exact title of the data, where filed, and the reference number.

**This plan takes care of much miscellaneous information**

The cards are filed behind regular alphabetical tabs, according to the index letter of the subject covered. For instance, "electricity" would be filed in proper order behind the tab marked "E."

Subjects in the same classification are entered together regardless of where they are filed. If it is necessary to compile figures on some one subject, for instance "electric rates," everything that the files contain in connection with this subject may be found by turning to the card marked "rates."

Once information is put on file it is essential that it shall not be lost. Whenever papers from the file, therefore, are lent to other departments, a rule in force requires them to be returned before quitting time. The file clerk attends to this, keeping record of papers taken away during the day, and collecting them at night.

In the department where this system has been adopted, a great deal of miscellaneous data is constantly being handled and the system has been found to work out admirably. Papers of any kind that may be required can be found quickly and surely, and the files themselves are not congested with an assortment of various-sized papers, bulletins and booklets.

**No business is too small to make use of a library**

The library is a valuable adjunct to the small business as well as to the large. For example: In order to keep an accurate record of the material in his business library a printer has devised a simple system.

"I am able," he says, "to keep a simple but very effective index of the comparatively few magazines I read thoroughly. There are certain subjects in which I am particularly interested, and all articles on these subjects are recorded in the proper place in a note book. I get many dollar-making ideas from the written experiences of other men, so I feel that the small amount of time my index takes is well invested.

"The index is arranged as shown in Figure 83 on page 161. At the top of the sheet are listed the subjects on which I am gathering material and the name of the magazine. One page is given to each magazine. At the left I enter the date of issue, and the date on which I read and filed the articles that interested me. In the squares I note the page.

"For a personal record of my reading in a small number of selected magazines, this has turned out to be a very handy plan."

**Perhaps this rather unusual method will fit your needs**

An interesting method for reducing miscellaneous clippings and other data to a standard size easy to file, is in use by an engineer.

He compiles his information from newspapers, textbooks and similar sources by copying with the aid of a camera.

He uses an inexpensive camera with a special lens procured for a very small sum. Whenever he sees, in trade journals, newspapers, or reference books borrowed from the library, any information that he considers worthy of a place in his records, he photographs it, mounts the print on a standard size sheet and files it alphabetically under the subject name in a looseleaf book.

By this method, a large sheet of printed matter can be reduced to a photograph of very small dimensions. If the reproduced characters are too small to be read with ease, he uses a powerful reading glass. For the small office with limited filing space, this plan has obvious advantages.

**Selecting the most helpful reading is the duty of this librarian**

In addition to the strictly reference function of the library, many concerns, through the library, call attention of executives to articles that should be of interest to them. The circulation slip is largely used for this purpose.

Whether or not the average man can in justice to the business find time to read during the day, it is evident that there are lines and desks where the work is intermittent and business reading may well "fill in;" that there are articles or books so important that they may well be prescribed as a part of the work.

## CHAPTER XII

# SPENDING LESS FOR OFFICE FORMS

**Is saving half the printing bill worth your while?**

AS the result of a few changes, one business cut its printing bill in half the first year—a saving of over $700. This reduction was secured by simply standardizing sizes and eliminating unnecessary printing.

Examination showed that the forms in use were of all sizes. This caused confusion in the files. The first step, therefore, was to adopt a standard width for all forms. This standard was one which was most easily accommodated by the typewriters, and yet one which was adapted to the filing systems in use. Length was also standardized. It was found that two lengths were necessary—a full size and a half size. In most cases the forms were used in triplicate and it had been the practice to have all three copies printed. As the duplicate and triplicate always remained in either the factory or the general offices, only the original was printed under the new plan. The other copies were of plain paper, in different colors where necessary to distinguish one from the other and as an aid in filing.

**Most wastes of office forms can be eliminated**

Hundreds of dollars can be as easily saved in many offices every year through care and thought in designing that important office tool, the form. Some of the waste comes in not designing the form so that its initial cost will be low, but perhaps at least as great a loss comes from not thoroughly determining how effectively the average office worker can use the form. If this is taken fully into consideration when the form is designed, the time consumed in filling it in can usually be reduced.

In the opinion of one manager, every concern should delegate to one of its staff jurisdiction over the method of keeping records, the forms to be used, their design, their routing, the manner in which they are filed, and how they will be manufactured, purchased, and issued for use.

Although most executives consider printed matter of minor importance, they would soon learn that one man thus authorized, might very easily save many times his salary in the cost of the stationery alone.

**There is a good idea here for the man whose office is small**

This plan was tried by a corporation, and resulted in a considerable saving. The supervisor of methods, as he is called, has jurisdiction over the methods and forms in use in all departments. The man who was chosen had made a careful study of the makeup of records. Coming as he did from outside the organization, he was free from prejudices which would have hampered a man taken from some department within the company. Before he took the office, each form was designed in the department which compiled the information to be put on it, and naturally it was designed to suit the convenience of that department. While this facilitated the compilation of the report, it frequently, to a much greater extent, retarded the work of the department making use of it after it was compiled.

**Substituting a form "policy" for guesswork**

The first step of the new supervisor was to procure a list of all records, reports, forms and the like, used by the company. He then analyzed the items on the list and classified them as to the ultimate purpose they served, which determined whether ease of compilation or ease of reference was the more important. When this was done, he considered each record or form in turn, judged how well it served its ultimate purpose, and made necessary changes.

After every item on the list had been scrutinized, and a few records eliminated or combined with others, the whole system of records was soon running smoothly with a definite policy behind it, and individual departments were no longer permitted to interfere with that policy by drawing up their own forms to meet their own needs.

In a general way, the user of printed forms needs to watch the following points:

1. A complete record of the consumption of every form in the group should be kept, and a perpetual inventory plan installed to allow the savings to continue indefinitely.

2. Complete data should be secured as to the use of the form and the results derived from its service. This will be helpful when considering possible changes.

**This plan saves money in buying**

3. The form should be designed to fill its requirements in use, and so that it can be handled economically by the printer.

4. Departments using the forms should be told about the manufacturing problems of the printer. They can then lend every aid to the purchasing agent, that he may prepare specifications which will appeal to the printer.

If the above rules are followed, purchasing agents can buy the forms at lower prices because they will be able to help the printer save money, and the buyer will ultimately profit.

**Approaching the "idea" in the cost of forms**

As a practical illustration of this very point, consider the saving which was made on a contract for certain forms used by one of the railroads. The printer handling this contract claimed that he was losing money, before these rules were observed, even though he was getting higher prices; whereas with the new lower prices and cooperation on the part of the various departments of the railroad company, he is able to make a fair and legitimate profit.

In taking up the study, the first step was to determine an ideal cost of manufacture regardless of the old methods. By "ideal cost" is meant a cost that could be secured by the printer if he had the opportunity of laying out his work in the best possible manner, using large presses during their otherwise idle periods, printing forms in large quantities, purchasing paper in carload lots, billing at unit prices, eliminating useless calls by salesmen, and thus handling the contract at a minimum expense. By giving the user the benefit of the savings that could be made in the cost, the selling price would naturally be reduced and an ideal price secured.

**Surely it is worth a little thought to save $1,536.40, as this man did**

Upon finding the ideal price in this particular case, a simple comparison was made with the price which was being paid to the printer. This comparison showed that a saving of $1,536.40 could be made on the printing of these forms, or 32% of the old cost of $4,950.

In this instance it was evident that the purchasing department had formerly bought these forms at a low price, for the printer was losing money. The purchasing agent's hands were tied as to further savings, however, because the users of the forms kept no records to allow him to estimate the consumption, and they were therefore con-

stantly sending in emergency orders, which he could not foresee. An executive order that simple records about the forms be kept resulted in the information coming to the purchasing department so that the ideal price could be obtained and the big saving resulted.

**Perhaps you, too, can make a big saving**

Another instance in which savings resulted, is that of a concern using a lot of invoices. They had these printed in two colors and pen-ruled, on paper weighing 24 pounds to the folio. By substituting print ruling for pen-ruling, by accepting a standard-size invoice one-half inch narrower, and by purchasing paper in bulk, 20 pounds to the folio, at 20 cents less a pound, 90 cents per thousand was saved on these forms.

**Are you using the most economical paper for your forms?**

Careful supervision over expenditures for forms resulted in bettered conditions and a saving in a small factory office in Iowa. In this case a large part of the saving was made by using a quality of paper more suited to the purpose for which it was required. The manager listed in one class all the forms, memoranda blanks and records that were used only within the house. In another class he listed letterheads, statement blanks, and other stationery which reached customers. On this second class he did not try to economize, believing it most important for customers to get a favorable opinion of the firm through its stationery.

In the first class of stationery, however, the manager found he could cut expenses considerably. He made several subclassifications from which he found which records were filled in on the typewriter, which ones with a pen, and which with a pencil. For the records that were made out on the typewriter, the manager gave directions to purchase a medium grade of coated stock; and he ordered "seconds," as he found the amount of poor sheets he had to throw away did not outweigh the first-cost economy. For the records to be filled in with a pen a better quality of coated stock was purchased. A cheap grade of uncoated paper is used for all the records that are filled in with a pencil. The saving that has been effected by these common sense economies has already amounted to several hundred dollars.

**"Several hundred dollars" was saved on paper alone in this case**

Saving in first cost is, however, only one of the considerations in designing office forms. If the convenience

**The clerks who use the forms often may point out opportunities to save**

of the person who fills out the form is not considered, a large waste of time usually results and the form may prove expensive, no matter how low its original cost.

When a New York office manager recently planned to remodel some of his office forms, he went over the forms with his head stenographer, listening while she explained her objections to the old forms. For the first time he saw these forms through the eyes of the typist — the girl who has to use them. Difficulties which the operators encountered in filling in the old forms were brought to light, and an intelligent analysis of these difficulties pointed the way to a more scientific basis for drawing up future forms. The outcome was a series of revised forms which are neater than the old ones, and which the operators fill in more quickly and with less nervous fatigue.

One of the first things the manager discovered during his investigation was the fact that speed and accuracy in typewriting are not entirely matters of personal efficiency. If the best results are to be obtained, the mechanism of the machine itself must be taken into consideration. Disregard of this important factor causes much loss of time and waste of energy, and is frequently the source of errors. In designing forms, do not forget that high personal efficiency cannot do its best when it is forced to contend against artificial restrictions.

**Designing forms that save time for the typists**

One of the first requirements for speed in typewriting forms is a fixed starting point for the operator. This means that all lines of writing should begin, if possible, at the same margin on the left side of the page. Using the marginal stop, the operator is able to push her carriage to the left only a certain distance. The point where the carriage automatically stops is the right margin. When the marginal-stop is once set, the typist need give the matter no further attention. This, at least, is true if all lines can begin on the same margin. If, however, they are irregular, the marginal stop is useless and the starting place of each new line becomes an arbitrary one.

The typist is then forced to look at the machine each time she writes a new line, in order to find out where the line begins, and to bring the carriage into place accordingly. This involves lost motion. It not only takes

valuable time to locate an arbitrary starting point, but more important, the character of the machine makes it impossible for even the most expert typist to move the carriage back quickly and accurately unless the marginal stop is used. Even after constant practice and familiarity with a form it is impossible to bring the carriage to a stop at an arbitrary point except at a sacrifice of speed. In cases where it is necessary to do so, it is not the operator but the form which is at fault. The operator, however, comes in for the strain and worry of searching for the beginning of the lines. It destroys her concentration and results in mistakes.

**There is a one best design for every form**

When forms are designed to make use of the marginal stop, the operator can give undivided attention to the matter to be written. New lines and spacings follow almost automatically. The need for considering the marginal stop was brought home with special force to this manager when he came to revise his order blank. Originally, the data printed at the head of this sheet was arranged as shown in Figure 90 on page 176. It is obvious that this sheet was drawn up without considering the typist who would have to fill it in. No two left margins are the same. On such a sheet the mechanical device of the marginal stop is of no value, and the operator must watch each new line to find how far the typewriter carriage should be shifted. In the revision these difficulties were considered. The new order blank (Figure 91 on page 176), provided for starting each new line at the same point on the left margin. With this form to fill in the operator does not need to look for the starting point, since the marginal stop finds it for her automatically. She wastes no energy, and does not sacrifice her speed. Furthermore, the completed work is neater and easier to read. Many office forms can be revised in this respect with equally good results.

**Before and after the forms were changed**

A second principle which the office manager discovered was the need for regularity in the spacing between lines. Fast writing is dependent, among other things, upon uninterrupted flow of writing. In making up forms, often no attention is paid to what seems like the unimportant detail of setting the type matter at intervals that will be convenient for the typist. The spacer on

**How poorly designed forms slow up work**

**ORDER**

DATED January 10, 1918

TO Este & Morgan Company,
23 Eleventh Avenue,
New York

PLEASE SHIP TO Reynolds Company,

ADDRESS 347 Tenth Street,
Brooklyn,
New York.

SHIP VIA Truck

WANTED At once

DATE SHIPPED

DATE PROMISED

DATE BILLED

FIGURE 90: Do you notice anything wrong with this shipping order? Neither did the company which used it until a general overhauling drew attention to it. Then it became apparent that typists shuffled the typewriter carriage hither and yon in filling in the form, thus wasting a lot of time. The lower figure shows the difficulty overcome.

**ORDER**

DATED January 10, 1918

TO Este & Morgan Company, 23 Eleventh Avenue, N. Y.

SHIP TO Reynolds Company, 347 Tenth Street, Brooklyn, N. Y.

SHIP VIA Truck

WANTED At once

SHIPPED

PROMISED

BILLED

FIGURE 91: Here is the shipping order shown above, as revamped for really effective work. The instruction headings were lined up, and now the typists can get out a great many more per day because they are able to use the tabulating devices on their machines. Perhaps this illustration will offer you suggestions for revising your forms.

**With these changes, the stenographer keeps her mind on her work**

the machine moves the paper up one, two or three lines, according to its adjustment. If all lines of a form are separated by equal intervals of space, the spacer is set for that interval and the operator worries no more about the matter. If, however, a double is followed by a single spacing, or vice versa, or, worse yet, if the spacing is irregular and does not correspond at all with the spacing of the typewriter, the attachment on the machine cannot be used to advantage. This is one of the mechanical features that the operator is likely to appreciate more than the man who designs the forms. Filling in blanks that are incorrectly arranged in regard to this detail wears down the typist's fund of nervous energy and her speed suffers. A second blank that the office manager revised with both this and the first principle in mind is shown, before and after revision, in Figures 92 and 93 on page 178. Note in Figure 92—the old arrangement—that some of the lines are single-spaced, while some are double-spaced. The result is disturbing to the typist, because it takes more effort to manipulate the spacer attachment. She must also remember when to differentiate between the single and double spacing. The new form remedies this fault.

**This saved her strength for work that counts**

A third principle which the manager worked out from his investigation is related to the second principle. This is: Eliminate spacing as often as possible. In order to space for a new line the typist must take her hand away, from the keys, turn the roll and draw back the carriage. These three movements in themselves consume precious seconds; but what is still more objectionable, they interrup the flow of writing and thus limit the operator's speed. It may seem a trivial matter except to an expert typist, but the loss is a material one.

**You might be surprised to discover how illogically most forms are designed**

The physical loss of energy also must be considered. It requires a pressure about equal to eight pounds to make a carriage return. Plainly, a decrease in the number of returns will increase the operator's speed. The reason this principle has not been more generally recognized in devising forms is because the old traditions of writing with a pen are still standard. With a pen it is easy to move the hand to the next line, but on the typewriter each new spacing means additional time.

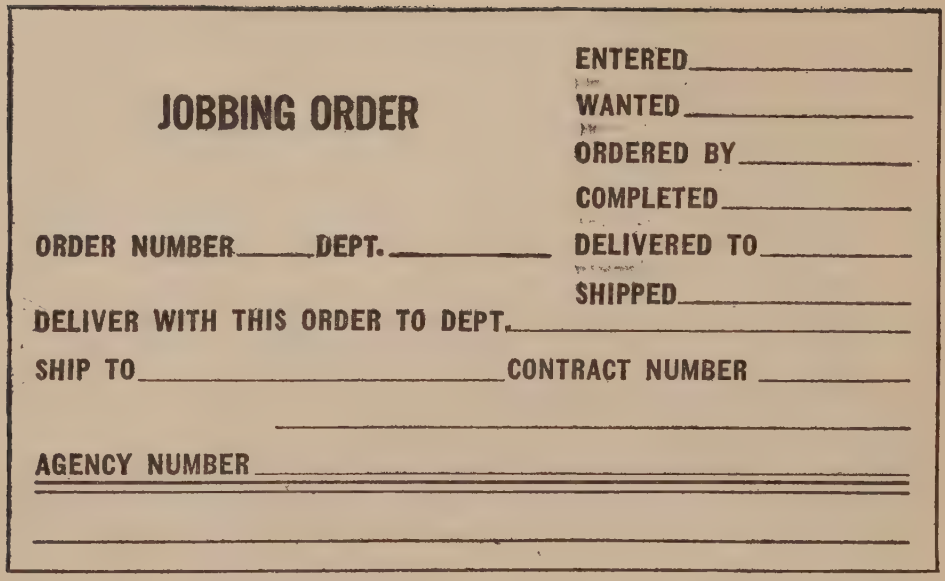



FIGURE 92: Just as soon as you look at this form it becomes apparent that it is a hodgepodge, either to fill in or to read. It's even more unsatisfactory than the one shown in Figure 90 because the lines are unevenly spaced, as well as lacking a uniform line-up for the instruction headings. The figure below shows how this form was improved.

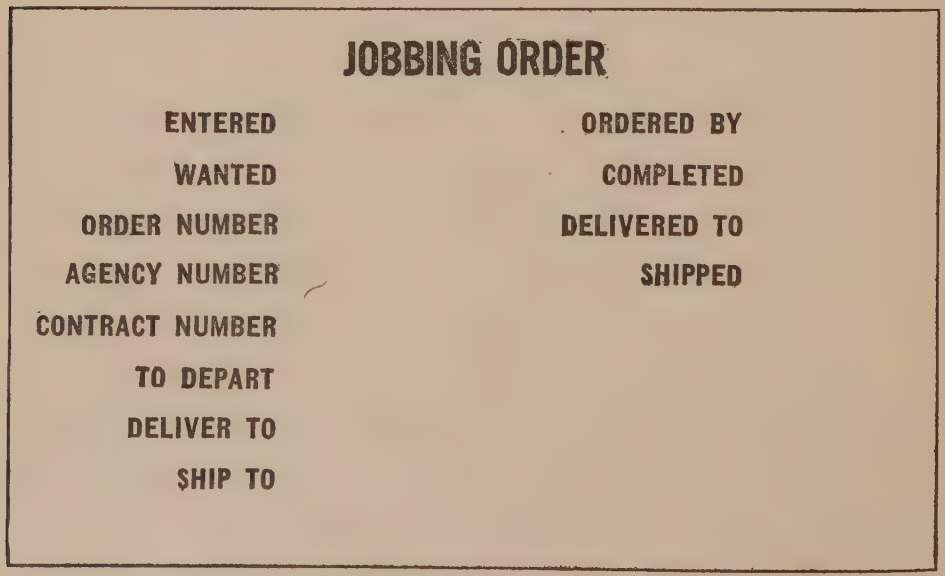



FIGURE 93: This is the jobbing order form shown in Figure 93, as finally changed to get the best results. Note here again the even line-up of all the instruction headings and the equal distribution of space between the lines. Little points like this often lead to big savings in offices, and a quite logical place to start in is on the office forms.

**How to design a new bookkeeping form**

In the small office where one clerk has diverse duties it is often most essential that every means be used that will simplify work. The bookkeeper in a "two-man" flour mill office designs all of the forms of the business, including those used in the books.

"In planning a form," he says, "simply jot down on a piece of paper, in any order, everything that should go on the sheet. Take out the space and column headings, and arrange them in order with a view to preference. Next decide what is to be the sheet heading. Then check the notations, and see that nothing is omitted. List the space columns and margins, and after each one note, in inches, the space allotted to it. Add these figures and the total is the width of the sheet. The depth should be the same always.

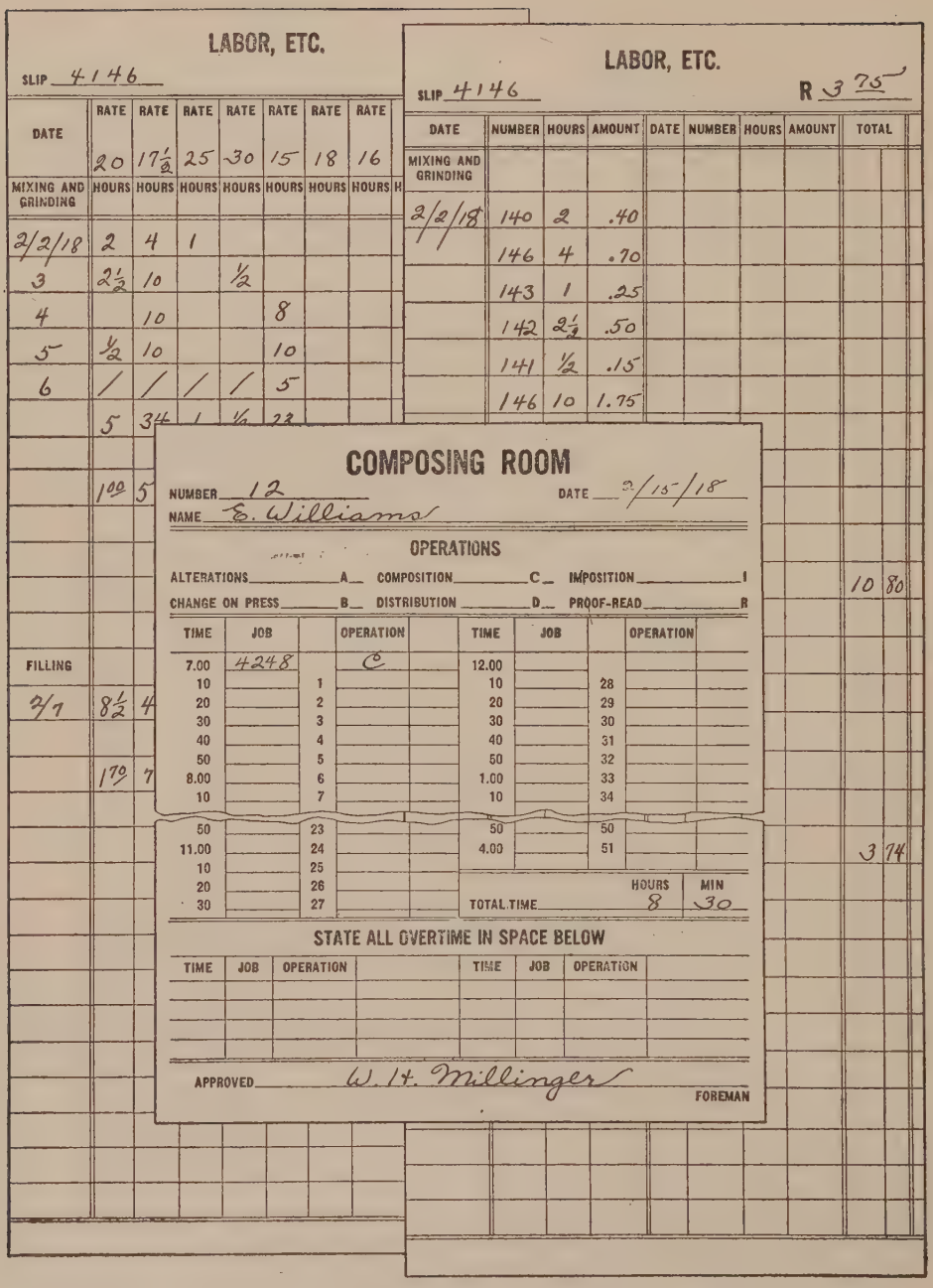
**How to save cost and prevent mistakes**

"Obtain a sheet of drawing paper, or of ordinary wrapping paper that is larger than is required for the form. On this rule in pencil the column divisions, marking at the top of the column what is to be printed there and indicating which of the columns are to be given the 1-inch unit and ¾-inch unit rule. On the lines that have been ruled, mark which are to be 'double red,' 'single red,' 'faint blue,' and so on. The lines can be ruled in color to assist the printer, if you wish. A sheet should be submitted after it is ruled, and on this have the printer paste a tissue paper proof of the printed headings for approval. See that the printed wording is properly placed on the sheet and the type uniform. If some of the headings, when spelled out, are too long and necessitate a change in type, it is best to abbreviate uniformly.

**How many forms should be ordered at one time?**

"A supply of 300 to 500 sheets are generally sufficient to order at one time; if, however, 25 or more sheets are used per month, 1,000 may be ordered. It is not advisable on the first order to stock heavily as certain defects may show up which demand revision on the next lot; if a large stock is on hand the mistakes will not be remedied promptly.

"I have found that a folder in the correspondence file helps in preparing forms. As improvements or changes are suggested, I file a note of it in this folder. At the time of reordering, this 'tickler' is referred to, and all needed corrections are made."



LABOR, ETC.

SLIP 4146

| DATE | RATE 20 | RATE 17½ | RATE 25 | RATE 30 | RATE 15 | RATE 18 | RATE 16 |
|---|---|---|---|---|---|---|---|
| MIXING AND GRINDING | HOURS | HOURS | HOURS | HOURS | HOURS | HOURS | HOURS H |
| 2/2/18 | 2 | 4 | 1 | | | | |
| 3 | 2½ | 10 | | ½ | | | |
| 4 | | 10 | | | 8 | | |
| 5 | ½ | 10 | | | 10 | | |
| 6 | / | / | / | / | 5 | | |
| | 5 | 34 | 1 | ½ | 23 | | |
| | 102 | 5 | | | | | |
| FILLING | | | | | | | |
| 3/1 | 8½ | 4 | | | | | |
| | 17? | 7 | | | | | |

LABOR, ETC.

SLIP 4146 R 375

| DATE | NUMBER | HOURS | AMOUNT | DATE | NUMBER | HOURS | AMOUNT | TOTAL |
|---|---|---|---|---|---|---|---|---|
| MIXING AND GRINDING | | | | | | | | |
| 2/2/18 | 140 | 2 | .40 | | | | | |
| | 146 | 4 | .70 | | | | | |
| | 143 | 1 | .25 | | | | | |
| | 142 | 2½ | .50 | | | | | |
| | 141 | ½ | .15 | | | | | |
| | 146 | 10 | 1.75 | | | | | |
| | | | | | | | | 10 80 |
| | | | | | | | | 3 74 |

COMPOSING ROOM

NUMBER 12 DATE 2/15/18

NAME E. Williams

OPERATIONS

ALTERATIONS ___ A ___ COMPOSITION ___ C ___ IMPOSITION ___ I

CHANGE ON PRESS ___ B ___ DISTRIBUTION ___ D ___ PROOF-READ ___ R

| TIME | JOB | | OPERATION | TIME | JOB | | OPERATION |
|---|---|---|---|---|---|---|---|
| 7.00 | 4248 | | C | 12.00 | | | |
| 10 | | 1 | | 10 | | 28 | |
| 20 | | 2 | | 20 | | 29 | |
| 30 | | 3 | | 30 | | 30 | |
| 40 | | 4 | | 40 | | 31 | |
| 50 | | 5 | | 50 | | 32 | |
| 8.00 | | 6 | | 1.00 | | 33 | |
| 10 | | 7 | | 10 | | 34 | |
| 50 | | 23 | | 50 | | 50 | |
| 11.00 | | 24 | | 4.00 | | 51 | |
| 10 | | 25 | | | | | |
| 20 | | 26 | | | | | |
| 30 | | 27 | | | | | |

| TOTAL TIME | HOURS | MIN |
|---|---|---|
| | 8 | 30 |

STATE ALL OVERTIME IN SPACE BELOW

| TIME | JOB | OPERATION | | TIME | JOB | OPERATION | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

APPROVED W. H. Millinger FOREMAN

FIGURE 94: The labor cost card at the left required several operations before the correct cost was arrived at. By arranging the card differently, as shown at the right, it was made more efficient, only one operation being necessary. The time card in the middle keeps a close check on the work and the results of each compositor's work.

**How one office force was cut from 18 to 12**

Even though a scheme like this is used it probably is well to analyze, at intervals, every form in use in the organization. Such a "going over" made it possible to reduce the number of employees on the staff of one factory office from eighteen to twelve, to operate the department as a whole on a more economical basis, and at the same time to increase individual salaries by raising the working standards of each person.

In this reorganization every form used in gathering facts for the office was carefully studied and revised with a view to simplification. Even so common a form as a labor cost sheet proved worthy of attention. The two specimens (Figure 94 on page 180) show how this sheet looked before revision and after.

**Simply changing the forms may cut down your payroll, as it did here**

Four operations were required to get the desired information when the sheet to the left was used. In the first time was copied from the workman's card insert. It was expressed in hours and fractions of hours, and was written in columns at the head of which were the given rates per hour as they had been previously indicated on the workman's card by the timekeeper. These columns of time were later totaled and then extended at the rates indicated at the column heads. The money amounts were then added together to give the total money cost of the labor required for the job.

On the revised card at the right, the time in money value is expressed directly on the cost sheet and the only subsequent operation is addition.

**How a single, simplified form saves hundreds of dollars a year**

Of course it was necessary to chart the hourly rates, figured out at the rates per hour and fractions of an hour up to ten hours. With these rates before him, the clerk now has no occasion for mental arithmetic, or machine or pencil figuring, when he draws off the time from the work cards as a basis for the cost sheet.

The adoption of the simplified labor sheet is saving this manufacturing company the cost of a calculating machine and hundreds of dollars a year in clerical service. Often similar slight modifications in office forms will save many dollars.

**Should mechanics do their own bookkeeping?**

An eastern company considered the advisability of installing equipment for recording time in the factory. The aim was to secure greater accuracy in the initial

records—the time cards. The cost man was instructed to examine the various devices on the market. After making a thorough study of the matter he reported that expensive new equipment would not remedy the matter so quickly as properly arranged time cards.

**How a change in the time-card form stopped one waste**

"You are paying workmen from eighteen to thirty dollars a week," he said in his report, "and yet you make them figure out their own time. You are paying a high price for inferior clerical service." At his suggestion new cards were devised. These made it unnecessary for the workmen to do any writing except to put in job numbers correctly.

All operations and their symbols are shown at the top of the card, as you can see. All that the workman needs to do is to fill in the job number opposite the time at which he begins work on it. The value of this method lies in the fact that when the time card reaches the office the record clerk's work is simple. The card is its own calculator. The time is divided into units of ten minutes each, and the units are numbered consecutively, due allowance being made for the lunch period. Thus, a man beginning a job at 8:40 in the morning and finishing it at 2:20 in the afternoon, has worked in all thirty-two units or five and one third hours.

## CHAPTER XIII

# TEN PLANS FOR REDUCING THE COST OF SUPPLIES

**Why standard tests have been found worth while—even on pencils**

EIGHTEEN office executives who were asked to name their most effective means of economizing in the use of office supplies emphasized the importance of standardization.

One of these executives, for instance, has made a close study of the pencils that are most effective for certain kinds of work. He has determined just where it is best to use a hard pencil, and where soft pencils will serve to better advantage. He has made further tests to determine which of several kinds of hard and soft pencils are best. Having arrived in this way at the one best kind of pencil, he orders in quantities, which enables him to effect a considerable saving in price.

In purchasing office forms, a wholesaler economizes in an effective may by printing on both sides of the sheets. Thus every form can be used twice. Again, the owner of an adjustment agency says that an effective method of cutting out waste in the use of supplies—and therefore lessening buying needs—has been to charge each desk with the quantities it uses.

**A simple record for past purchases**

"In planning our stationery purchases," says a wholesale grocer, "we use a simple record which keeps track of the quantity and price paid. Formerly our stationery was ordered by anybody and everybody, and usually it was not ordered at all until someone discovered we were out. Now we have systematized and standardized the placing of orders, and can buy stationery to much better advantage than before."

Much waste can be eliminated by careful attention to this question of supplies. Standardization, good buying, careful storing, and proper use of supplies will usually effect appreciable savings.

**How two concerns saved on their paper bill**

The war changed all requirements in a small office in Waterloo, Iowa, because it cut off much of the supply of certain dyes that had always been used in making the tinted paper on which many of the office forms are printed. As a result, this concern found that there was greater economy in specifying plain white paper, where before the war the other kind proved as satisfactory, and cheaper.

Paper, in fact, has recently been a serious item to many men who buy, owing to the price. A Cleveland concern has made a worth-while saving by purchasing "news print" paper by the ream for carbon sheets and scratch pads. It is cut and padded by the paper company, and is considerably less expensive.

**Rubber bands are expensive—do you safeguard them?**

Few managers have given the question of using rubber bands more than a passing thought, although in almost every business house they cut a big figure. Pounds and pounds of them are shot away by office boys, other pounds are carried home, and still more pounds find their way to the waste basket, while untold numbers of them are used unnecessarily because careless clerks will put half a dozen bands around a package where one is sufficient. And within the past few years the price of rubber has gone up with such leaps and bounds that elastic rubber bands are becoming almost a luxury.

Recently a buyer for a firm using quantities of these accessories sought to reduce the cost by having assortments placed in small boxes so that no more would be taken than necessary on an order. The bands were issued in that manner, cutting down the waste of them several hundred per cent.

**Here's one way of saving on rubber bands**

He also tried out a gum tape machine for fastening packages and found that the cost of a mile or so of the tape about equaled that of a pound of rubber bands; so the machine became permanent. Now the firm uses gum tape machines for all packages going out of the office and for all papers to be stored in the office.

A great waste lies in the spoiling of forms and stationery from improper handling and storing. The manager of one office has solved this problem.

"The only objection I have to looseleaf systems," he says, "is the heavy waste that often comes through failure to take proper care of the sheets. I have seen forms, which

Power Corn Sheller — Closet No. 7 — Shelf No. B

Form or Circular No.

Low Limit 1000 — Desirable Order As may be decided

| Date | Order No. | Amount | Date | Received | Date | Delivered | On Hand | Date | Received | Date | Delivered | On Hand |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/5/16 | 20411 | 10000 | 7/9/16 | 10000 | 7/9 | 3200 | 6800 | | | | | |
| | | | | | 7/20 | 1700 | 5100 | | | | | |
| | | | | | 7/24 | 4000 | 1100 | | | | | |

FIGURE 95: If office supplies are to be conserved, the office manager must know how rapidly they normally are used. A card like this not only gives this information, but it lists the past orders with the order number and shows the quantity received as well as the amounts delivered, the balance on hand, the exact location in the stock room, and so on.

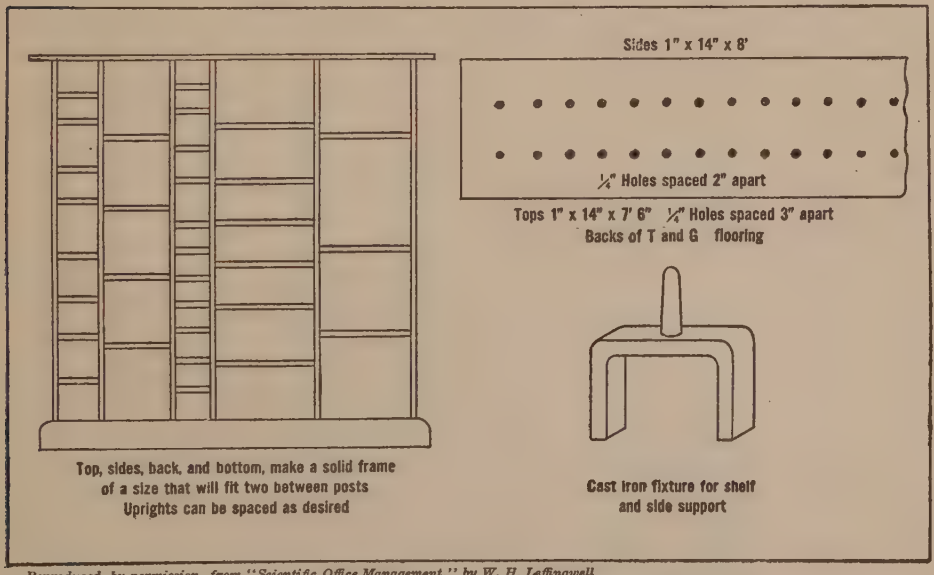

Sides 1" x 14" x 8'
¼" Holes spaced 2" apart
Tops 1" x 14" x 7' 6" ¼" Holes spaced 3" apart
Backs of T and G flooring
Top, sides, back, and bottom, make a solid frame of a size that will fit two between posts
Uprights can be spaced as desired
Cast iron fixture for shelf and side support

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FIGURE 96: Shelving like this for better supply storage can be made either of wood or steel. If of wood, it can be made by any good carpenter at slight expense. Each kind of supplies should have a separate compartment. This is easy to provide for with construction of this type. Note the varied sizes of the shelves shown in this illustration.

**How to conserve the supply of office forms**

cost from half a cent to ten cents each, lying in open piles on a shelf in the stationery room. These piles gradually shift from side to side in being handled, allowing dust and dirt to attack many of the top sheets and sometimes those lying far below. A bookkeeper, in changing his books, will naturally run down below the injured ones for a clean supply and throw away the soiled sheets. Often, too, he takes more sheets to his desk than necessary and never puts them back, or will soil or injure them before they are used. When such losses occur every time a book is changed, the sheets thrown away quickly run into money; but the waste is not recorded, it seems small and generally it escapes the manager's notice.

"This waste, however, is easily eliminated, and in doing away with it in my concern I have made the sheets easier to handle and care for. In selecting the paper, I use heavy stock ledger paper of the best quality that can be obtained. It will stand erasures without letting the ink run into the texture and blur the writing and it is heavy enough to stand wrinkling and heavy usage, since sheets may remain in current binders for years. I have discovered that there is no economy in buying light weight or cheap paper, for at most only a small quantity is used. The increased initial cost is more than met by the service which a better grade of paper gives.

**A method for storing stationery that saves money**

"The sheets are 'green-edged'; that is, green solution is applied to the edges of the paper. When the sheets are bound in book form, this gives the book a neat appearance and overcomes the untidiness of soiled and uneven edges.

"When the sheets come from the printer, I have them tied up in small packages containing from twenty-five to fifty each. On one edge and one side of each package the form number or name is marked in ink. The wrapping paper is heavy, to keep out light, and the packages are stored on a flat, dry shelf in order to help them keep their shape and color.

"To overcome waste in broken packages I buy twenty-ounce duck (canvas) and make bags in the form of an envelop, having buttons and loops of tape sewed on the flap for fastening as shown in Figure 100. These bags

are just large enough to contain the contents of one of the packages. Current needs are supplied from these bags, and when one bag is emptied, a new package is opened, the bag is refilled and no loose sheets are left lying around to become soiled or injured. The bags protect the sheets in every way.

**This plan saves time all around**

"Shelves are installed in the vault, one shelf for each bag. A loop of tape is sewed on the side of the bag and on this the name of the sheet is printed in ink. This serves a double purpose; it locates the correct bag and aids in pulling it down from the shelf. The sheets are thus readily accessible for the bookkeeper. He takes the bag with all its contents to his desk and removes only enough sheets to change the binder.

**Special cabinets have been found effective when the stock is large**

"Forms other than book sheets are also given care. They are delivered in small, tight packages, and wrapped, marked, and stored the same as the looseleaf sheets.

"I have two cabinets as shown in Figure 101, nineteen inches deep, fifty-two inches wide and sixty inches high, each having three adjustable shelves. They are set in a convenient location for the stenographers and bookkeepers. One case contains the broken packages of letterheads, envelops, carbon paper and all the other forms used by the stenographers, while the other holds all the forms, excepting the book sheets, to supply the bookkeepers and clerks. The size of the package is ordered so as to fit the space reserved in the cabinet for the form.

**Broken packages of stationery collect dust and lead to waste**

"One of my stenographers is in charge of the cabinets and stationery room. Every Thursday she carefully goes over them, straightening and replenishing the stock as necessary. No broken packages are allowed in the stationery room to accumulate dust and later be consigned to the waste basket. Shortages are shown in ample time to restock. By having this system, with a single clerk in charge of the office supplies, great efficiency is obtained and waste is practically eliminated.

"The waste of stationery is apt to be a large and elusive item of expense, and it is such methods as I have described that help to keep this item low. A little care at practically no additional cost is, I have found, conducive to great economy."

**This purchasing agent started out well**

An overcareful policy in buying and distributing office supplies sometimes results in a waste of time and effort that more than offsets the saving.

The proprietor of a southern cotton mill says in this connection: "Mr. James was put in as purchasing agent about a year ago, succeeding a man who had been exceedingly careless and easygoing in handling office supplies. No one knew better than Mr. James that there had been waste and he set out to put on the brakes, as I expected him to do. For the first month or so the results seemed what I wanted.

"He adopted a system of issuing supplies by which the wants of each member of the office force were checked up and compared with the work accomplished. He kept pace with new methods, and introduced into the office the notion of care in small savings which had been one of our greatest needs. The cost of office maintenance took a sudden drop and I congratulated him on these results.

"But one day I happened to overhear a conversation between two stenographers that set me thinking. The stenographers were evidently ruffled at the way affairs were going under Mr. James' direction. I began a quiet investigation. I discovered that our 'office feeling'—the spirit of team work among our people—had fallen to about the vanishing point.

**He got after lax methods of handling supplies**

"Up to the time when Mr. James stepped into the purchasing agent's position our office force had been noted for its loyalty. In spite of the fact that we had several hundred clerks, we had been able to maintain a sense of personal relation that brought about effective results. Our clerks worked under the best conditions, so far as their personal comfort went, and they took real pleasure in the day's routine. Carelessness in the use of supplies, encouraged by the lax methods of Mr. James' predecessor, was about the worst criticism that could be made of them.

"Mr. James began by keeping exact records of supplies furnished. Nobody found any fault with that, although I discovered in my investigations that his manner of announcing various changes was rather unfortunate—it led some of the employees to think they were under suspicion.

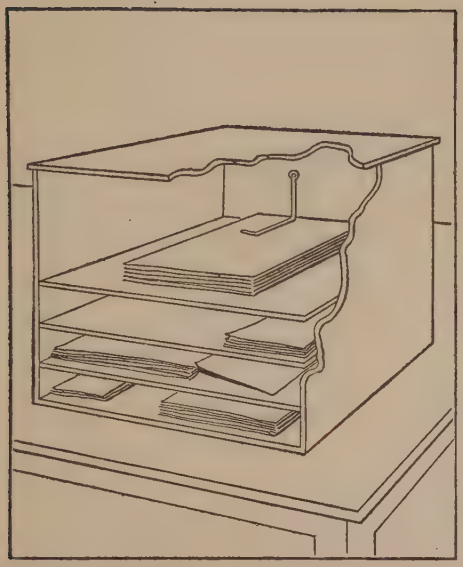

FIGURE 97: In some offices more stationery is wasted by soiling, than is used. This cabinet placed upon the typists' desks of one concern cut the cost of paper measurably.

**Purchases of Stationery**

| Date of Invoice | PRINTER | Amt. Ordered | Price per 1,000 | |
|---|---|---|---|---|
| 11/21/04 | | 51M | 3% | 00 |
| 9/5/07 | | 101 1/40 | 3% | 88 |
| 6/30/08 | | 100 14/40 | | 83 |
| 9/27/10 | | 98 29/40 | 3% | 68 |
| 12/30/11 | | 102 1.00 | | 67 |
| 9/21/12 | | 91½ | 3% | 72 |
| 6/27/13 | | 105 | 3% | 70 |
| 11/24/14 | | 50M | 3% | 70 |

FIGURE 98: Here is a simple record that may be kept for each kind of printing. If ordered from more than one printer, the printer's name is placed in the second column.

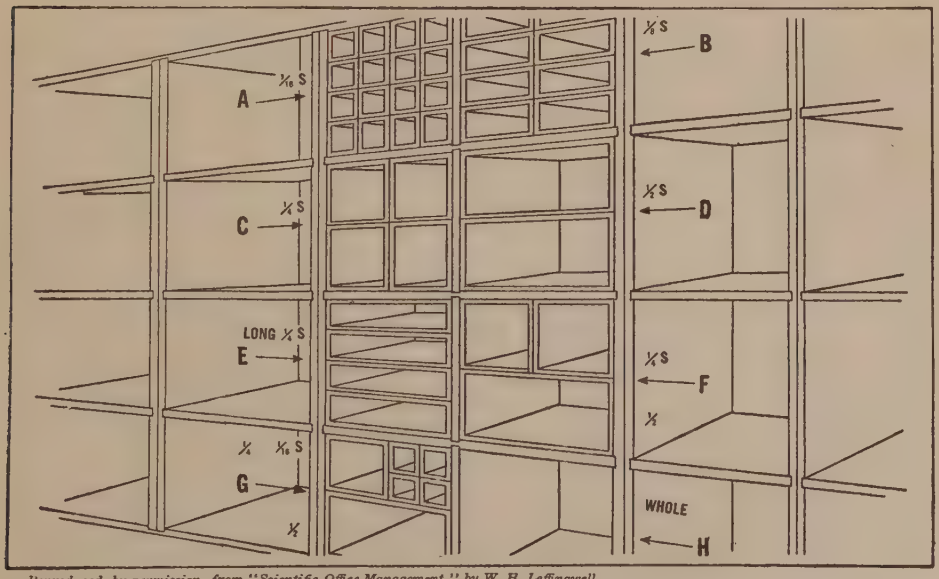


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FIGURE 99: This convenient rack for supplies can be made to accommodate anything from penpoints to ledger sheets since the sections can be subdivided into compartments of practically any size or shape. If the supply room is in charge of a clerk who has sole access to supplies he can be held responsible for their good condition when wanted.

**Penurious methods, however, don't always pay**

"But his success in cutting down expenses at first evidently made him anxious to show too good a record every month. Not content with seeing that there was no waste, he began to cut down the quality of supplies. Cheaper correspondence paper made its appearance. I had noticed this casually, but the change was so slight that in the rush of other matters I had given it little thought. Then, cheaper ink was supplied, poorer mucilage, and pencils that deteriorated in quality with every purchase.

"Typewriters, too, had previously been kept in the best of repair by frequent visits of an inspector from the agency. This work had been done on contract, so that aside from keeping the machines clean, the girls had had no trouble with them. Mr. James canceled the contract, and after that, as one of the stenographers said, 'it hurt him like visiting a dentist' to provide adequate repairs.

"When a stenographer reported that her machine needed attention he would ask her if it wasn't something she could attend to herself. Often it was, but it took time that showed up unfavorably in the record of her day's work. And when a repair man was necessary, it was sometimes days before he arrived.

"The same conditions appeared when it came to providing new office or desk conveniences. Previously the office force had prided itself on having every needed labor-saving device or convenience about as soon as it was marketed. Without doubt, our liberality had gone too far. But under Mr. James we went too far in the opposite direction.

**A "penny wise and pound foolish" policy**

"An improved copyholder came on the market—one that was excellently adapted to our work. Mr. James was asked to supply the office, and after fencing for a while as to the utility of it, said he would take the matter under consideration. He was still considering it when I looked into the situation, although the request had been repeated several times and notwithstanding that the business was in condition to spend money that would increase office efficiency.

"These are merely individual examples of the attitude Mr. James took toward purchases of all sorts. Such an attitude could have only one result. First, the clerks

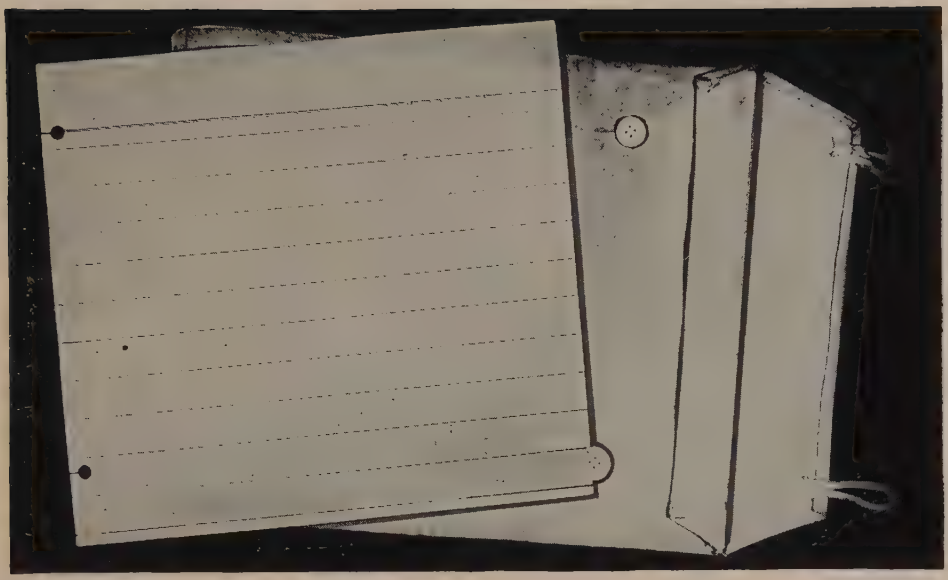


FIGURE 100: In many offices dust and handling spoil a large part of the ledger sheets before they ever see use. To prevent this one concern stores the sheets after the original package has been broken in heavy canvas bags like these. Handling is made convenient by putting the loops on the end. Bags like these may be obtained at very small cost.

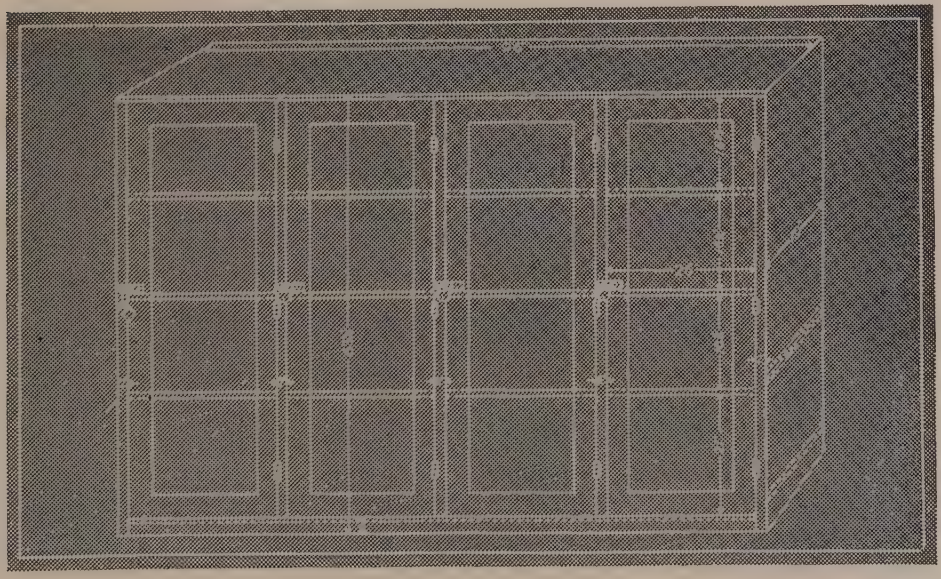
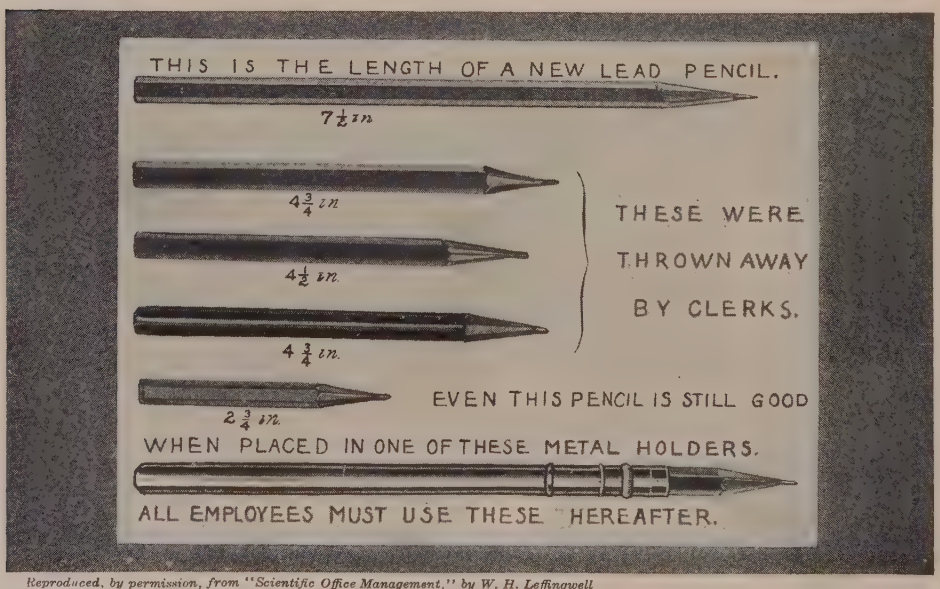


FIGURE 101: Probably any carpenter could make an effective supply cabinet for you, from this simple drawing. While many cabinets are open in front, it may be best, if your office is in a dirty and dusty city, to have doors provided. Such cabinets often save hundreds of dollars. They can be made practically dust-tight with felt "weather strips."

FIGURE 102: This man is testing pencils to decide which kind is best for his office. It's surprising how much can be saved in the yearly cost of this individually small item by determining the exact degree of lead hardness that will give the best results for each kind of work. Other supplies usually can be tested beforehand, often with equally good results.


THIS IS THE LENGTH OF A NEW LEAD PENCIL.
7½ in
4¾ in
4½ in
4¾ in.
THESE WERE THROWN AWAY BY CLERKS.
2¾ in
EVEN THIS PENCIL IS STILL GOOD
WHEN PLACED IN ONE OF THESE METAL HOLDERS.
ALL EMPLOYEES MUST USE THESE HEREAFTER.

*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 103: This picture carries two good suggestions. The first is that by using the inexpensive metal holder the last inch of a pencil is made as serviceable as the first. This picture was placed on the bulletin board in one office to show how quickly little savings will mount up. Adapting the idea may set your employees to thinking — and saving.

grumbled, thinking the changes were temporary and accidental. They tried to make up for the inconveniences by closer attention to their work, just as they would have done in a rush season—that is what I call office loyalty. But when the annoyances continued, their grumbling became chronic and they stopped trying to make up time and turn out quality work when pencils broke and typewriter ribbons filled the type or required frequent changing.

Poor office tools usually make for poor work

"The 'office feeling' had undergone a change. The employees felt that if the management considered that their work was worth only inadequate supplies there was no reason why they should care about quality. About the time I began my investigation I noticed that the quality of the letters I was signing had fallen off noticeably. Not only were the characters smudgy, but there were a great many mistakes. The stenographers were getting careless on their own account. And when I looked up the records, I found that the actual output of work was growing smaller, and routine tasks were piling up.

"Finally, after I had satisfied myself about conditions, I took the matter up with Mr. James. I found that instead of recognizing mistakes in his methods, he was fretful over the attitude of the force, accused them of being irritable and careless, and at last declared that he believed they were trying to 'do' him—usually the last resort of the executive without the right perspective. Of course, the situation was an intolerable one. A new executive came in who struck the happy medium between wastefulness and overcarefulness and soon the office ran smoothly once more."

There's a happy medium in this plan

Following are several plans which are valuable in stopping office wastes. Many of them are described by their originators, and should be "liftable" for use in the general run of offices.

*1. This plan saves dollars every week on the stamped envelop bill*

Stamps are small items but they count up heavily

"Stamped envelops which have been incorrectly addressed or otherwise spoiled may be thrown in the waste basket by the clerk or stenographer who has made the error, because he fears discovery.

**This plan saves stamps**

"To encourage saving such envelops for redemption at the post office, I have placed a large pasteboard box on the mailing table. It bears this notice, 'Deposit Here All Envelops for Redemption.' When full, the contents are redeemed. There is no private examination to see who was at fault. The saving in postage amounts to quite a sum."

*2. These methods saved 75% of the carbon paper bill*

"Our firm had been paying about a cent a sheet for carbon paper for a long time," says a chief clerk, "and, with something like fifty stenographers and typists, the bill for carbon paper alone was no trifling matter. The workers apparently failed to get the best use out of the paper supplied to them.

"I set out to discover the wasteful workers. After a short time, I found that the majority used each sheet only about five times. I saw a young man in one department use his until it was completely worn out. He was a typist, and wrote on 'form' paper. All he had to do was to fill in two lines each at the top and bottom of the page.

**Here's a plan that should be effective in any office**

"The remedy I found for the situation was to have stenographers and typists buy ten sheets of carbon paper out of their own pockets. Ten sheets for ten cents. That woke them up.

"That month we bought less than half the usual amount of carbon paper. After my experiment no more sheets went into the waste basket with only half a dozen impressions made from them. Each employee received his ten cents back after a reasonable time.

"I went further, however. I had the young man who filled in forms save his carbon paper after using. It was given to a stenographer who used her carbons for letters. The letterhead took up the first quarter of the sheet, and the signature the last few lines so that the portion used by the typist was not needed by the stenographer. At present we use about one quarter the amount of carbon paper we used a year ago."

*3. Here's a plan that saved on stationery bills*

A scheme that practically cut in two the bill for blotting

sheets was recently devised in the office of a consulting engineer. The men were in the habit of taking quantities of these sheets and stocking up with them, each man taking what he thought he would need. But as there were no places about the drafting tables where such sheets could be kept well preserved, they soon became creased or soiled, and then many were thrown away, although they had had no use at all.

**Special forms are expensive—here are some tested ways to save them**

"To overcome this unnecessary waste," says the engineer, "I had the stock clerk make up a paper folder in which was fastened a sample of every kind of sheet obtainable, the smallest sheets on top. These sheets were then numbered with heavy block numbers and the folder hung in a conspicuous place. A full supply of sheets was provided, each kind in a separate folder or roll with the corresponding number on the outside, and all of the supplies kept under lock and key. When a sheet was needed it took but a few seconds for a draftsman to run through the folder, select the most suitable kind of paper and call for it by the proper number.

"This system cut out practically all the waste. In addition, it introduced to the men new kinds and forms of sheets which often were more suitable for the work in hand than those they had been in the habit of choosing."

*4. This plan saves both stationery and time*

An office manager was cautioned by the buyer that his typists were using more stationery than was necessary —the inference being that there was a large waste either from misappropriation or carelessness. Observation showed that sheets of paper would lie around on a desk, become soiled, and then be destroyed. It was estimated that some employees wasted 10% of the stationery issued to them.

**Stationery soiled is stationery wasted**

To remedy this condition, all stationery now is issued in packages of 25, 50, and 100 sheets. At exactly 10 sheets from the bottom of the package is placed a requisition slip which the typist is required to sign in order to get more paper. These slips, as turned in, are filed in the stock room, and when totaled at the end of the month, show exactly how much and what stationery each operator has received.

**A simple rack that helps keep forms clean**

In order to keep the stationery from becoming spoiled, uniform paper racks are used. As the paper is placed in the rack, with the end toward the user, pressure is first applied to the pile by means of the thumb nail—much as a printer does when he prepares his paper to feed to the press—in order to slant the pile of paper so that the edge of each sheet may be easily taken off. Permanent pressure is then applied by means of a spring.

This arrangement is shown in the drawing (Figure 97). The pressure from this attachment is enough to hold the sheets in place, yet not enough to mar or tear the paper when it is removed.

By this method it is possible to keep an accurate record of each sheet of paper, to whom issued and when, and to check up outgoing letters against the amount of stationery each operator received.

*5. This plan stopped a 55% waste of expensive forms*

**Perhaps this plan would work as well in your office**

"The purchasing agent for our concern," says a manufacturer, "noticed, when going over a report of the supplies his department had furnished the rest of the organization, that an immense quantity of triplicate order blanks was used. A telephone call to the order department gave him the number of orders for machines received from branches and salesman. This was entirely incommensurate with the number of blanks that were issued—in fact, the proportion was 450 actual orders to a thousand blanks.

"As a result of this investigation each branch manager was limited to a minimum of 975 orders per thousand blanks; 25 seemed a reasonable amount for unavoidable losses. Similar restrictions now apply to practically all of this company's forms. Since adopting this rule the purchasing agent has increased his orders for scratch pads, and in almost every other stationery item there has been a marked drop."

## CHAPTER XIV

# A FEW SHORT CUTS IN ACCOUNTING

Cutting bookkeeping expense in two

"IT costs us only about half as much now as formerly to handle our records on accounts payable," says a bookkeeper who is always looking for new ways to cut office costs. "We also spend only about half as much time at the work as before; yet we find that our records are even more valuable than they used to be. Our system has worked so well for us that we believe it should produce similar results in other concerns.

"We made the saving in two ways: first, we reduced the number of operations; second, we adopted a compact card index and a simple voucher sheet in place of an immense voucher register, ten feet long, that we had previously used. The work is now arranged so that several entries are made at one time on the typewriter. This considerably reduces the time and labor.

Why large books are expensive to handle

"We have eliminated hand work in a dozen or more places, using rubber stamps instead; yet we have not decreased the value of the records in a single instance. In fact, we increased their effectiveness when we reduced the labor in making them.

"Our former plan was to make a record of all vouchers to be paid on a page that contained enough columns to accommodate every department or controlling account, governing auxiliary department records, to which an expenditure might be charged. Our company owns a number of mines. In order to have the record complete, it was necessary to have a separate column under each department for each mine. As our operations grew, the size of this book increased, until at the time when it was abandoned, as we have said, it was fully ten feet long when open.

"The importance of having immediate access to the original record of an invoice and its voucher was indicated

**How carbon copies can safeguard your interests**

to us time and again in legal proceedings. We never were able to satisfy a lawyer with anything but the original record, and we found that our filing system did not permit us to find that quickly. We had been depending largely upon our ten-foot register and an adequate filing system.

"As our system is now, the originals are the records to which we most often refer. This original record we know as the voucher sheet which is assembled in a bound volume with the original invoices and papers. It is a carbon made at the same time as the statement of settlement—which goes to the supply company from which we have purchased—and the paying check. All three of these documents are written at once. The statement of settlement is exactly twice the size of the check, and the voucher sheet is twice the size of the statement of settlement.

**A duplicating plan that saves time**

"Writing the three at once means an important saving of labor; and it also means that all the documents correspond in every detail. The check, which is smaller than the other sheets, drops out of the typewriter after the name and address, the amount, and a reference to the statement of settlement are entered. Then as much of the invoice as may be necessary is copied to the statement of settlement; and at the same operation, of course, the carbon transcribes the invoice on the voucher sheet. At the next turn of the typewriter platen the statement of settlement drops out. A final entry is made on the voucher sheet to indicate the account to which the bill is to be charged, the name of the mine, and the initial of the clerk who made the voucher. In this way, one operation makes all these documents.

**Why window envelops have worked out successfully**

"The treasurer signs the check after it has been signed by the general auditor. We then place it, with the statement of settlement, in a window envelop—thus we avoid the necessity of writing the address again.

"For quick reference to a given creditor's account we have a card file. The cards are arranged alphabetically according to the names of the creditors. Each card has twenty-four spaces, in which to make records of payments. Columns are provided to show the voucher number, date of entry, the amount and the date.

**An unusual but effective voucher check**

"Our method of handling checks is a little unusual. In fact, the sheet which we have been calling a 'check' might better be termed a 'warranty of payment.' In the lower left-hand corner, under the words 'payable through,' we stamp with a rubber stamp the name of the bank through which payment is to be made. We have accounts in several banks. When our check, or 'warranty,' returns to the bank, it is brought, together with all of the 'checks' received on that day, to our treasurer. He at once makes out a regular check to the bank covering the entire amount. One entry then suffices in the cash book for all the payments made that day through that particular bank. Later the separate checks are returned to the general auditor, and are filed in numerical order. The invoice (and any other papers connected with the transaction) and the voucher sheet are all bound together in uniform volumes, the number on the voucher sheet representing the page number.

**This plan makes record-finding easy**

"The operation of finding a certain voucher is something like finding a given page or chapter in a book in a library. We first go to our card index, find the name of the concern to whom the voucher was made, find the item wanted, and thus secure the voucher number. We then go to our voucher "library," select the book containing this number, and find the voucher and papers as you find a page number in a book.

"I should like to call special attention to an important feature of our check. Just above the space left for indorsement are these words, which turn the check into a valid receipt: 'Indorsements legally and technically correct must be made below. Officers of corporations must give their proper titles. Signatures by mark must be witnessed and witness's residence must be stated. One party signing for another must attach power of attorney. Indorsement of payee hereunder will constitute a receipt for the account specified hereon.'

"A complete record of all voucher amounts is made on a 'voucher index.' This index is printed on a letter-size sheet. It has columns in which we enter the voucher number and amount. Postings of totals are made from this index to the ledger.

**Errors in check writing were entirely eliminated by this plan**

"We post to the other ledger accounts direct from the voucher sheet, which is our permanent and orignal record.

"This system, which requires us to make only two postings, has greatly decreased the number of errors. Experience has shown us that over 60% of the errors in balances are directly due to rerecording and summarizing. Our method eliminates most of this extra work. We have proved in our office that even the small concern can have the benefits of a voucher system."

Another interesting voucher system is used in a small eastern office. The treasurer of the concern tells about it: "The basis of a 'voucher system' is the check, and it is by the checks that I govern the filing of such records as authorize their issuance. My check book is in duplicate, each strip of original checks having a blank sheet below, numbered to correspond with the checks. The blank sheets are permanently bound in the check book. The checks are written by hand with a manifold pen and soft carbon, thus providing an exact duplicate of the check itself.

"This method practically makes impossible errors that often occur when the notation of the check is copied on a stub or elsewhere. Typewritten checks in manifold are splendid. But a small office is sometimes not equipped to handle these successfully.

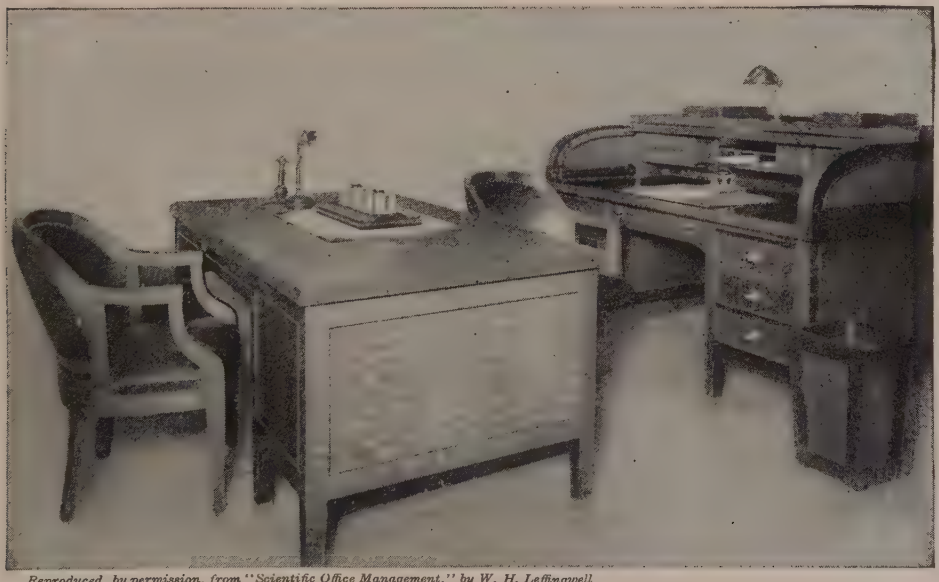
**Are all the documents in the transaction together?**

"The statements and invoices, and such other papers as may have anything to do with the payment, are securely stapled together. The top one is stamped with a rubber voucher stamp, on which the three middle letters of the word 'voucher' have been broken away to leave a blank space. In this space the number of the check used in paying the account is written.

"The papers are then filed by this number in a folder, which is indexed by the first and last check numbers it contains. The folders are placed in a vertical transfer filing case.

"When one or more part-payments are made on an account, the voucher number of each payment is put on the papers. But all the papers are held on the current unpaid file until the final payment is made and the transaction is finally disposed of.

FIGURE 104: After all, the purpose of accounting is to show the "boss" what the business is doing. An inadequate system may result simply in littering up his desk with a mass of reports that are hard to wade through. If the reports come to his desk in compact, orderly piles, it helps to lighten the labor of reading and disposing of them.



*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 105: When reports of large size must be examined, the work of going over them can be lessened by having a large flat surface to lay them out on. That's what the flat-top desk shown in this picture is used for. This desk is also handy for the occasional "extra" man. One executive uses the pigeonholes in the roll-top desk for confidential papers.

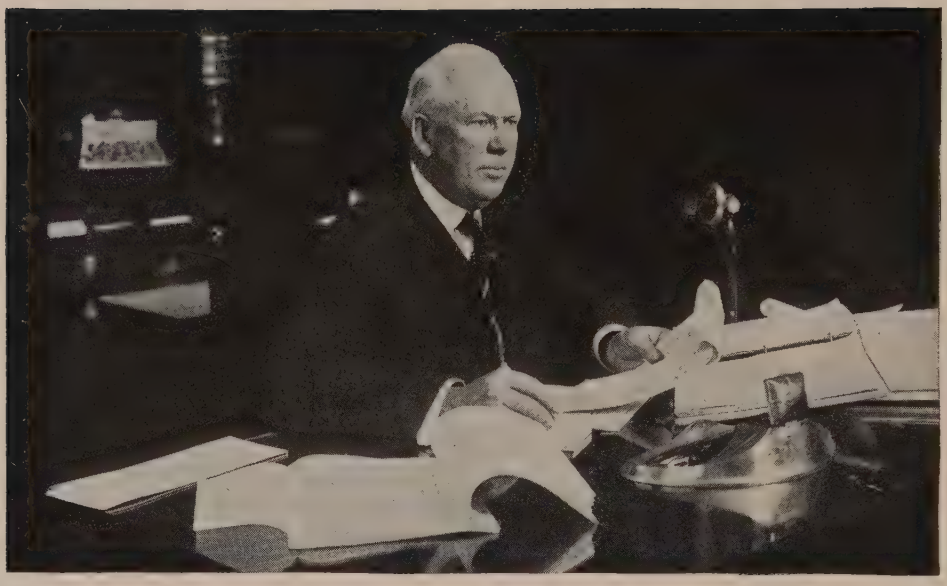


FIGURE 106: The use of well-selected short cuts in the accounting department helps to make the reports that go to the owner or chief executive so compact and informative that they will take up only a few minutes of his time each day. Below are shown two of the reports this manager is looking over. They are ready for him early every morning.

**COMPUTING-TABULATING RECORDING COMPANY**

NAME OF COMPANY REPORTING _____

STATEMENT OF REVENUE AND EXPENSES FOR MONTH OF _____

| | CURRENT MONTH | LAST MONTH | SAME MONTH LAST YEAR |
|---|---|---|---|
| | _____ % OF GROSS REVENUE | _____ % OF GROSS REVENUE | _____ % OF GROSS REVENUE |
| A Charges to Customers | | | |
| Less Returns | | | |
| Net Charges to Customers | | | |
| B Charges to Related Co.'s | | | |
| Less Returns | | | |
| Net Charges to Related Co.'s | | | |
| TOTAL GROSS REVENUE | | | |
| C Cost of Goods Sold | | | |
| D Loss on Returns | | | |
| E Commission or Equivalent | | | |
| F Depreciation Reserves | | | |
| GROSS PROFIT | | | |
| G Undistributed Expenses | | | |
| Net Profit from Operation | | | |
| H Other Income | | | |
| I Deductions from Income | | | |
| NET PROFIT | | | |

**COMPUTING-TABULATING-RECORDING COMPANY**

COMPARATIVE BALANCE SHEET AS OF

| ASSETS | MONTH ENDING | SAME MONTH LAST YEAR | INCREASE (BLACK) DECREASE (RED) | CHANGES SINCE JAN. 1 THIS YEAR INCREASE (BLACK) DECREASE (RED) |
|---|---|---|---|---|
| A PLANT AND EQUIPMENT | | | | |
| 1 Real Estate—Land | | | | |
| 2 Real Estate Buildings | | | | |
| 3 Plumbing, Heating, Lighting Equipment | | | | |
| 4 Sprinkler System | | | | |
| 5 Machinery and Power Transmission | | | | |
| 6 Tools, Jigs, Punches and Dies | | | | |
| 7 Drawings, Patterns, Engravings, etc. | | | | |
| 8 Trucks, Scales and Stock Boxes | | | | |
| 9 Factory Furniture and Fixtures | | | | |
| 10 Office Furniture and Fixtures | | | | |
| 11 Machinery, etc. – Rented | | | | |
| 12 Other Equipment (Autos, Horses, etc.) | | | | |
| TOTAL | | | | |
| B Good Will, Patents, Trademarks, etc. | | | | |

| | | | | |
|---|---|---|---|---|
| A Charges to Customers | | | | |
| Less Returns | | | | |
| Net Charges to Customers | | | | |
| B Charges to Related Co.'s | | | | |
| Less Returns | | | | |
| Net Charges to Related Co.'s | | | | |
| TOTAL GROSS REVENUE | | | | |
| C Cost of Goods Sold | | | | |
| D Loss on Returns | | | | |
| E Commission or Equivalent | | | | |
| F Depreciation Reserves | | | | |
| GROSS PROFIT | | | | |
| G Undistributed Expenses | | | | |
| Net Profit from Operation | | | | |
| H Other Income | | | | |
| I Deductions from Income | | | | |
| NET PROFIT See Form A | | | | |

| | | | | |
|---|---|---|---|---|
| 9 Office Furniture and Fixtures | | | | |
| 10 Machinery, etc. Rented | | | | |
| 11 Other Equipment | | | | |
| 12 Doubtful Accounts – Customers | | | | |
| 13 Doubtful Accounts – Salesmen | | | | |
| 14 Amortization of Patents | | | | |
| TOTAL | | | | |
| M SUNDRIES See Form A | | | | |
| N SURPLUS | | | | |
| TOTAL | | | | |

FIGURE 107: A good test of what a business is doing lies in comparative figures. Even if you keep your books yourself it is often worth while to get reports similar to these to tell you how current expenses and the current balance sheet compare with those of last week, last month, or last year. Sheets similar to these will help to give you this information quickly.

"Then they are filed by the check number of this final payment and they can easily be identified by this number in case subsequent reference to them becomes necessary.

**The records can be compactly filed**

"Payroll vouchers, and others coming from such sources as the cash book, are filed by the check number in the same manner. This makes the entire filing system unified and simple and it is easy to get at any papers we happen to want later.

"I have found that vouchers for a company doing a yearly business of two hundred and fifty thousand dollars usually do not fill more than one transfer drawer in five to seven months. The system is convenient, insures quick reference, entails little operating expense, and is extremely compact."

Highly mechanical in its routine, bookkeeping offers many chances for discovering short cuts which save time and lower costs. A Milwaukee manufacturer, realizing this fact, was struck with what seemed to him the needless waste in entering cash receipts item by item in the cash book. As a result of his study he devised a method which does away with this labor. He now posts direct to the customer's account from his letter, filing this for reference in case of a dispute about payment.

**How one concern handles incoming money**

In assorting the day's mail in this concern, remittance letters are all put in a pile by themselves. Pinned to each letter is the check, draft, postage, currency, or money order which pays the bill. The papers accompanying the remittance are stamped with the rubber stamp impression following:

NAME .....

Checks..... Drafts..... Currency.....

Postal M. O..... Express M. O.... Postage.....

Amt. Rec'd..... Dis..... Cr. to Account.....

Cashier Dept..... Acc't Dept..... Account .....

When a letter accompanies the money the impression is stamped on the letter. If a statement is enclosed with the remittance, the impression is stamped on the envelop. The statement is later receipted and returned to the

FOLIO NO. 214

For month of June 191 4

## ACCOUNTS PAYABLE

| PURCHASED FROM | AMOUNT | PAID | | | | WHAT PURCHASED | CHARGE | Folio | Constructing | Sundry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Amount | Disc. | Ck. No. | Date | | | | | |
| Forward | 1175 70 | | | | | | | | 1121 50 | 54 20 |
| Danforth, P.M. & Co. | 19 75 | 19 75 | 75 | 18559 | 6-2-14 | Paper & Twine | | ✓ | | |
| Dorr, Miller & Co. | 24 50 | | | | | Sheet Brass | | ✓ | | |
| Dibbler & Fay | 21 45 | | | | | Castings | | ✓ | | |
| Edwards, Page & Young | 15 | | | | | Printing | | ✓ | | |
| Eggert, A. & Son | 35 | | | | | Belting | | ✓ | | |
| Dawson & Co. | 4 75 | | | | | Excelsior | | ✓ | | |
| Ernst Thompson & Co. | 3 25 | 3 25 | | 18629 | 5-30-14 | Ice | | ✓ | | |

FIGURE 108: This accounts-payable report gives at a glance the amount purchased during the month. It helps to prevent oversight of due accounts, thus avoiding unpleasant complications. It also shows to whom the business is going as well as what purchases are being made. It also serves as an accurate check on the material used and its price.

MATERIAL RECEIVED

P. O. NUMBER

CHECKED

PRICES O. K.

EXTENSIONS

ENTRY

IN

OUT

## INVOICE RECORD

| DATE OF INVOICE | ACCOUNT NUMBER | INVOICE RECEIVED NUMBER | AMOUNT |
|---|---|---|---|
| May 28 | 4 | 35474 | $ 31,231 |
| 28 | 11 | 5 | 68 |
| 30 | 18 | 6 | 680 |
| 28 | 173 | 5 | 27,000 |
| 27 | 179 | 6 | 125 |
| 27 | 179 | 7 | 325 |
| 27 | 179 | 8 | 75 |
| 28 | 179 | 9 | 738 |
| | | | 795325 |

FIGURE 109: Here are a couple of simple forms that will help you keep a check on the money you pay out. To the left is the one used as authority for paying out money. It certifies that the invoice is correct. The form at the right lists the invoices as paid, the account number, the number of the invoice received, and also gives a record of payments.

customer, while the letter or envelop, as the case may be, becomes what would ordinarily be the company's journal record of the transaction and is handled accordingly.

**How the money is checked**

The cashier's department receives these letters, together with the money, in a bunch after each mail delivery. There, the remittance is detached from the letter or envelop and a checkmark placed on the form shown, after the proper classification—drafts, postage, checks, and so on—in which it falls. The amount of the remittance is also noted in the proper space.

Next, the letters are taken to a wide-carriage adding machine, where the figures noted on the letters or envelops are added up on a white sheet of paper styled the "recapitulation sheet." The sum must agree with the amount of money actually received. When the cashier checks over and finds that this is the case, he O. K.'s the sheet with his initials and sends it, together with all papers, to the bookkeepers.

In the meantime, he has debited cash with the total amount received, and awaits the report of the bookkeeping department in order to make his distribution to the credit of the correct ledgers.

**Checking invoices easily**

The first operation of the bookkeeping department is to arrange the remittance letters and envelops in alphabetical order, according to the name of the sender. After this has been done, the amounts are again listed on a recapitulation sheet with a space left between each letter of the alphabet, as follows:

| | | |
|---|---|---|
| 1 | 76 | A |
| 11 | 33 | B |
| | 68 | |
| 2 | 20 | |
| 3 | 10 | C |
| 3 | 07 | |
| 51 | 83 | |

The same process is followed throughout the entire alphabet. These figures are totaled, and their sum also must agree with the cashier's approved total, which appears at the left on the same sheet.

The object of this second listing is to give a chance to trace and identify the remittance at any future time, even

**A specific example of how the plan works**

though the correspondence itself should be misplaced in the files. These recapitulation sheets are carefully filed in order day after day, and they act as a check in case of dispute.

For example, a man named Harris writes in, claiming that he sent his check for $43.12 under the date of January 10th, but that the payment fails to appear on his monthly statement. If search shows that by some mistake the letter or envelop which accompanied his remittance has been misplaced or lost, the recapitulation sheets would still afford a chance of locating the payment. By looking under H on three or four sheets under dates near January 10th, the bookkeeper could readily learn if such an amount had been received. Failure of an item to appear on the recapitulation sheets is pretty definite evidence that the letter containing the remittance has never been received.

**Adding machines help out in many offices**

The company has found it well worth while, because of this additional check against mistakes, to spend the few minutes required in listing remittances in alphabetical order.

The bookkeeper next posts the various accounts into the ledger direct from the letters or envelops. Whenever a customer is entitled to a discount, the amount of the discount, and the full sum credited to the account, are noted in the proper spaces on the form originally stamped on the letter when it arrived.

After the posting is complete for all letters, the bookkeeper again puts the recapitulation sheet into the adding machine and figures out the proper credit distribution; that is, he determines how much went into ledger number one, how much into ledger number two, and so on, and the amount of discount allowed.

**Tedious detail is done away with**

The recapitulation sheet is again referred to in the cashier's department, where the cash entry for the day is completed by distributing the amounts received to the credit of the various ledgers. The letters and envelops are filed in the general correspondence files.

This system has completely done away with the tedious listing of remittances item by item in the cash book, without destroying the careful check on amounts received which the cash book also affords.

There is, if anything, even less danger of making mistakes than where the cash book is used, and the plan cuts the posting required in the bookkeeping department almost in two. Thoroughly simple, it can be adopted in both small and large concerns, whether the number of remittance letters received each day amounts to 10 or 300.

**Can you tell on the instant how much you owe?**

One concern found that its accounting routine was defective in that the bookkeeping department could not, at a moment's notice, tell just how much the firm owed. Its system was indefinite and left the accounting department very uncertain of itself in regard to outstanding obligations. In fact, an examination on one occasion revealed that where the books showed total accounts to be $60,000, the actual indebtedness was $92,000.

It is probable that very much the same condition prevails in other concerns. In most cases where the system is unsatisfactory the invoices are recorded on a register and then referred to the purchasing department or stock room for an O. K. on quantity, price, extensions, and so on. Only after these departments have completed their work does the bookkeeper get the invoice to credit it to accounts payable, and charge it to the proper material or distribution accounts.

**A simple change made this result possible for one concern**

That was the way this concern formerly handled its invoices. By making a few simple changes in the regular routine the system has been tightened up and when the president wants accurate information about the amount of accounts payable, the bookkeeper can satisfy him without delay or error. Invoices are now handled as follows:

All incoming mail is received and opened in the mailing department. The head of the department assorts the mail into its various classifications. He puts all accounts payable invoices on one pile, all accounts receivable remittances on another, and so on. The invoices, like the other pieces of mail, are then time-stamped and immediately referred to the accounts payable clerk in the bookkeeping department.

Here three operations are performed. The invoices are first put in alphabetical order; second, they are stamped with a rubber stamp impression as shown in

**How it was done**

Figure 109 on page 204; and third, they are numbered consecutively, the number being put in the upper right-hand corner of the invoice. This number is used to identify the invoices in case two or more should come on the same day for exactly the same amount. It also is used in checking invoices received back from the purchasing department.

After these three operations have been performed, the bookkeeper then posts directly from the invoices to the creditors' accounts, posting the invoice record number when doing so. Each and every account in the accounts payable ledger has a number. This number the ledger clerk, as soon as he has posted the invoice, places directly underneath the invoice record number on the upper right-hand corner of the invoice.

**There is no delay in getting the information here**

After each mail's bunch of invoices has been posted, the next step is to make a record of them. This is done by listing the invoices on an adding machine in the manner indicated in Figure 109 on page 204. The adding machine in use makes it possible to record the date of the invoice, the account number which identifies it, the invoice record number and the amount of the invoice. From this record sheet the bookkeeper makes one entry on his journal record; that is, he credits the entire amount to his accounts payable account in the general ledger and debits the entire amount to an account termed "purchases suspense" account.

The invoices are then referred to the purchasing department for O. K. as to quantities received, prices, extensions, and terms.

**Here a single file gives a complete record**

The record sheet (Figure 109) is filed away on a board file, where it is used as an order register. In other words, it is a complete record of all invoices received, and shows all that were referred to the purchasing department. As the invoices come back from that department they are checked off on this record sheet.

The accounts payable account is credited with the total amount of invoices passed through, and the purchases suspense account is debited. Here is one of the best points of this system. By referring to the controlling account in the general ledger the bookkeeper can tell at any time the exact amount of the firm's indebtedness.

**This plan shows the status of any account instantly**

The balance charged to the "purchases suspense" account represents either actual material on the way, or material received but not passed for payment by the purchasing department.

The purchasing department completes its check on the invoices and they are returned to the accounting department, where, as explained before, they are checked once more against the invoice record. Then they are recorded on the distribution record as a credit to the "purchases suspense" account and as a debit to the various material, stock, and administration accounts. From this distribution record the bookkeeper again refers to his original posting in the accounts payable ledger, and puts a checkmark in the space provided for that purpose on the ledger sheet. This shows that the item is correct and ready for payment.

With this system, therefore, it is possible to look at any creditor's account and tell at a glance just how much is owed and just how much has been passed for payment.

## CHAPTER XV

# HANDLING OFFICE CALLERS

**Building good will at the front door**

A SALESMAN stepped into the reception room in an office. Seated at the information desk was a middle-aged man who looked as if he might be at least the vice-president.

The salesman presented his card. After the man at the desk read the firm's name, he looked up with a cordial smile.

"Are you acquainted with our Mr. Walker?" he asked.

"Yes," the salesman replied, "he is the man I want to see."

"I think he is in his office now. Just a minute, please, and I will find out."

The man at the desk then got Mr. Walker on the wire, announced the salesman, and directed him to Mr. Walker's office.

"I would take you up myself," he said, "but it just happens that I am unusually busy right now. If you have any trouble in finding Mr. Walker, let me know."

This salesman was not a particular friend of Mr. Walker's, nor of the man at the information desk, nor, in fact, of anybody in the company. He was just one of the run of business callers.

Any other caller would have been treated the same. It is a definite policy with this company to make office callers feel at home. The man who sits at its information desk is selected for his peculiar fitness to carry out this policy.

**It's important to keep your best foot foremost**

While it is next to impossible to measure the results obtained by this policy in dollars and cents, the company is convinced it pays. A brusk or discourteous reception at business front doors is not so uncommon but that the concern which puts itself out to be friendly is often well remembered.

**How would you like to be greeted like this?**

At the very next office where the salesman called, a girl busy at a typewriter looked up as the caller approached her desk—which was also the information desk. In an interval in the gum-chewing process she inquired curtly:

"Got a card?"

The impression she gave was an unfavorable one—at least it was negative. But when a concern greets its callers with outstretched hand, news of that concern is apt to travel fast.

Salesmen are talkers. Good will may grow anywhere—even in the smoking compartments of Pullman cars. It pays to show courtesy to every caller if for no other reason than that it is not always possible to tell at a glance whether he is a customer or a salesman.

The sum of what people say and think about a business is an important constituent in that intangible factor in business, good will. In building good will, it is possible to make either friends or enemies by the method of greeting callers at the business front door.

Some firms, however, apparently do not agree that it pays to take pains to create a good impression on office callers. And the same attitude sometimes extends throughout a business, resulting usually in the loss of good will, often in the loss of orders.

It is often in the smaller offices that a caller gets scanty or discourteous attention from employees. In the large office there usually is someone whose sole duty is to welcome the caller. While this is perhaps out of the question for a small office, the clerk who is nearest the door can do much toward making friends for his employer by copying the methods used by the professional doormen.

**Could you blame this man for not coming back?**

A western business man recently had a disagreeable experience with one of those concerns which do not go out of their way to please office callers. At some inconvenience to himself, and with only the interest of the company on which he was calling in mind, he searched out their offices.

It was the first time he had called. His expectations were aroused because the company advertised extensively, and he had already talked over the object of his visit with its president, who was much interested. The

**An office run like this often drives away business**

president had, in fact, requested him to see one of the department heads and go over the matter again.

Upon entering the office, he found that the outer door banged against a railing. This railing surrounded a space so small that a fat man had to squeeze himself when he closed the door. Just beyond this "reception room" was a row of open-end files showing a disorderly pile of papers.

A dozen stenographers worked noisily in an equally pent-up space. Heaps of papers lay on their desks. They took plenty of time between tasks to talk.

In the rear of the room an executive leaned against the open door leading into his office—a stuffy place, littered with books and papers. He was chatting with another executive, who also was leaning against an open door—this one leading into another stuffy and disorderly little office. The two men were discussing trivialities.

**It's just as easy to give a favorable impression**

"Go as you please" was written all over the dingy office. When the caller entered, the messenger boy was puttering about the letter files, and he did not move to take the caller's name until it pleased him to do so. Then he stated that the department head whom the caller wished to see was busy. The caller did not wait.

This may seem like an extreme instance. Yet it is perhaps safe to say that dozens of offices are every day turning away opportunities through their failure to make callers feel at home.

It is always interesting, of course, to look at the other side of the picture. As you go into the Chicago office of a certain well-known manufacturing corporation, you will find yourself in a fair-sized reception room, not unlike the outer office of a prosperous physician. A large oak table between two windows is supplied with an assortment of up-to-date reading matter. There is a rug on the hardwood floor.

**A front door diplomat!**

At a desk sits a modestly uniformed colored man, who rises to greet you. No matter who you are, the attendant treats you with the courtesy and dignity that the concern wishes shown to all callers.

"Whom do you wish to see?" the attendant will ask, And after you mention the name—"Very well, will you please be seated while I take your name in?"

FIGURE 110: A fine place to build business good will is in the room where callers are received and where often they must wait for a few moments before seeing their man. This concern provides displays of its products which keeps the waiting visitors so interested that the time passes both quickly and pleasantly. Isn't there a suggestion here for you?

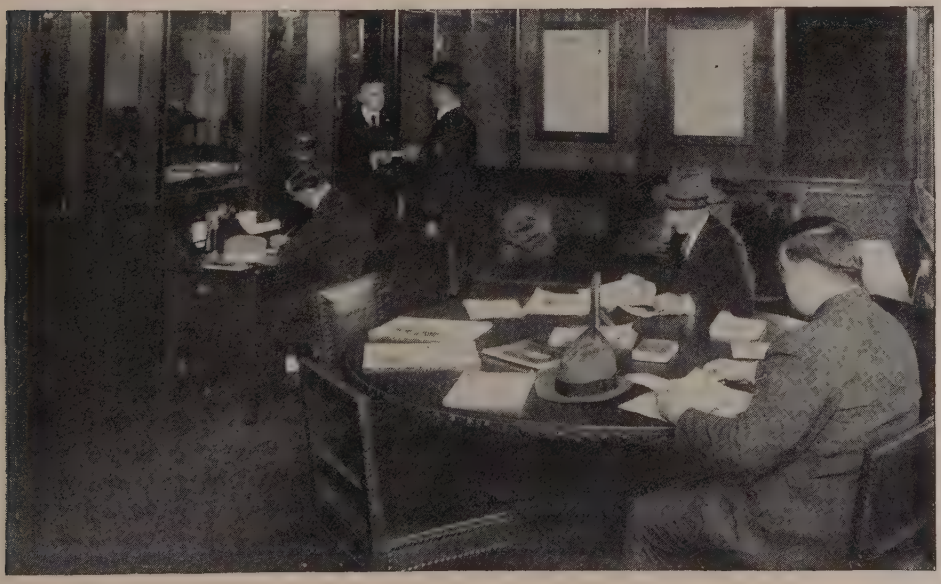


FIGURE 111: "Like the lounge of a club," is the comment one visitor made when he first saw this room. And yet if you look carefully you will see that it is not an expensively furnished room at all. The writing desk with stationery provided is an unusual touch that appeals to the waiting caller. Visitors are likewise supplied with copies of periodicals.

FIGURE 112: These three books tell one executive's secretary if he may be disturbed while talking to a caller or whether the caller is welcome or not. Just how this plan works is told on page 221. It may be just the plan you have been looking for to get rid diplomatically of time-wasting visitors. At least, we'll agree that time saving is most important.

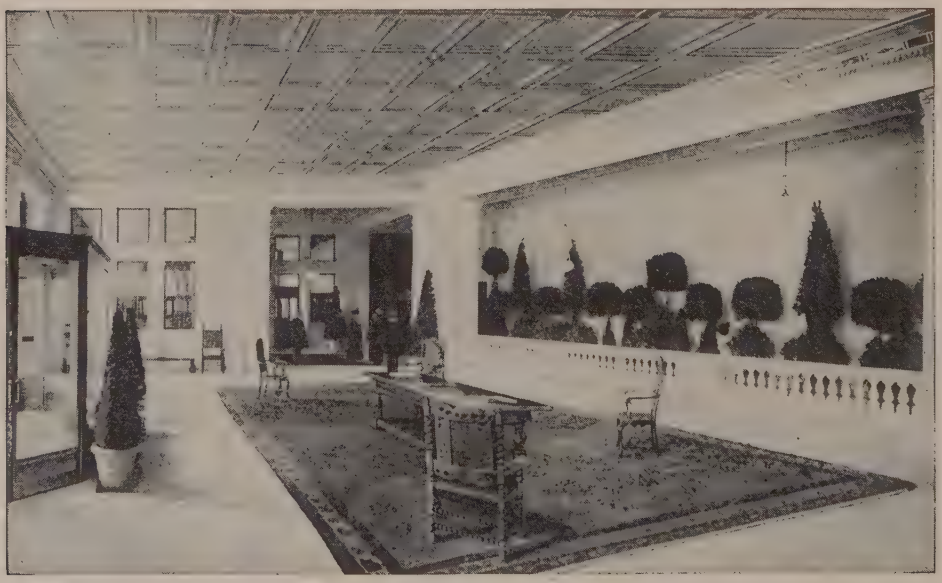


FIGURE 113: Some concerns find it profitable to afford pretentious entrance rooms like that shown here. However such luxury is not always essential for making the visitor comfortable. Many really enjoy better the welcome of the homelike room shown at the bottom of page 217 and, of course, the saving amounts to quite an item at present-day cost.

When he comes back, if you must wait, he makes it pleasant to do so. For he is likely to say: "Mr. Jefferson will be obliged if you will wait a very few minutes." He thus tactfully permits you to do Mr. Jefferson the favor of waiting.

**This attendant is really helpful to callers**

In this office, as often as you call, provided, of course, that your mission warrants it, you will not be subjected to that common and extremely discourteous catechism: "What do you want to see him about? Is it company business?" If it is necessary to question you, you will be questioned in so tactful a way that you are not likely to take offense.

If it happens that you do not know whom you should see, you will find the attendant ready to help, and full of information. He becomes your guide and conducts you through corridors, past partitioned offices, and leaves you finally, with a bow, at the office of the proper executive.

One seldom comes away from this office without a cordial feeling for the company and its executives.

Such treatment undoubtedly pays; if not immediately in dollars and cents, it makes for good will in several ways that eventually return the investment manyfold. It is not necessary to have an imposing reception room and a uniformed attendant, of course. But it is essential that whoever meets your office callers shall have a ready smile and a friendly attitude toward them; shall feel that they are his company's guests, and, therefore, his own guests.

**Perhaps you can't always measure the value in money —but courtesy undoubtedly pays**

The entrance or waiting room is usually the first place a favorable impression can be made. It is not necessary that this be pretentious. If the office is too small to warrant a separate room, there can be, at least, several comfortable chairs that callers may use while waiting. One firm, located in an old and far from artistic building, fitted up a waiting room at a cost of less than $150, that was so out of the ordinary, and so pleasant, that it has created much favorable feeling in spite of the poor outward appearance of the building.

It was formerly a bare room, containing only benches and a rickety table. It now has a comfortably upholstered bench along the walls and a table upon which

**A simple but unusual waiting room**

are current trade and daily papers. The firm's advertising is mounted neatly in two or three portfolios, with the date of appearance and the name of the magazine hand-lettered beneath each advertisement. Posters, street car cards, and worth-while lithographed material are carefully framed and hung on the walls. These wall displays are changed as often as new material is issued.

An especially interesting feature is a handsome, revolving globe map of the world, which attracts much attention. There is an attendant in the room, capable of politely referring the stranger to the person he wishes to see.

A novel treatment of another anteroom is used by one firm. This firm makes a specialty of street car advertising. It has arranged a bench in its waiting room which closely simulates one side of a street car. Above this seat are displayed some of its cards exactly as they are shown in the cars. The cards thus displayed are frequently changed.

Dodge Brothers, automobile manufacturers, do not like the term "waiting room," so they call theirs the "courtesy room." Two executives are in charge of it who make a point of welcoming the caller in a friendly way. There is nothing extravagant in the furnishings, as may be seen from the top illustration on page 213.

**A "courtesy room" that helps sales along**

Instead of old, thumbed magazines, the Gray and Davis Company provides an exhibit of the devices which it makes. In this way, a silent sales appeal is combined with courtesy.

The purchasing agent of an Ohio factory believes that visiting salesmen may be a definite means of spreading good will for his concern, as well as a source of valuable market information, and that, therefore, it pays to treat them with every mark of courtesy. With this idea in mind he has set aside a pleasantly furnished reception room where visitors may readily entertain themselves in comfort, if it is necessary for them to wait a few minutes.

On one of the walls of this reception room, neatly framed, is a notice which expresses this policy very well. The notice reads as follows:

FIGURE 114: Often a hundred or so visitors ranging from bank officials to salesmen will be waiting in this large room. Making the waiting caller comfortable is the keynote here just as it should be in the small office. Here it took the form of deep, loungy chairs and oil paintings—that's the only difference. A less pretentious room is shown in Figure 115.

FIGURE 115: This waiting room is neither expensive nor elaborate, but the comfortable atmosphere takes the unrest from waiting. The man in charge is a courteous old employee who can no longer do office work, but whose experience enables him to direct callers to the men they want to see. Simplicity was foremost in mind in designing and equipping.

FIGURE 116: Perhaps you think the caller would become lost in this palace-like room and never get to see his man. As a matter of fact, the attendants are so prompt in handling callers that the waits are very short. Before one is well started admiring the room he is likely to be called to his interview. The dignity of the business is reflected by this room.

FIGURE 117: Now here are accommodations for a large number of callers, so arranged that the reception room takes up only what might otherwise be waste space in a necessary corridor. This may suggest to you a way to utilize a waste corner and thus find space for the reception room you want but could find no place for up to the present time.

TO COMMERCIAL MEN IN ALL LINES

**Getting the salesmen on your side**

We believe that you come to us with a proposition which you feel will be of mutual benefit.

It is therefore our policy to give every man a chance, and his proposition consideration.

Practical factory tryouts are checked by both our inspection and test departments, working independently; the latter department being equipped with all modern appliances for making both chemical and physical analyses.

Subsequent shipments are handled in the same manner, thus insuring due consideration for quality.

If the method pursued in handling your particular proposition seems to you not to have been in full accord with our policy as outlined, we want to know it.

By using the cards and the addressed envelops which you will find in the desk, you will be assured of the matter coming to the personal attention of the man in general charge of purchases.

We are indebted to you for the many new things you have brought to us which have been factors in our progress; not only the goods which you sell, but also the improved methods which have come under your observation and which you have suggested for our benefit.

We are open to new ideas and advantageous substitution, and solicit your further suggestions and assistance.

**How does this room impress customers?**

Salesmen seldom have to wait long in this concern to get a chance to state their cases, but when they do the time passes quickly.

The reception room is in itself helpful in giving callers a favorable idea of the concern. It is large and is provided with comfortable chairs, a writing table, and the latest copies of magazines. A branch post office which the company has installed for the use of its employees has one window opening into this room for the convenience of the callers as well.

In addition to the notice already quoted, another one hangs on the walls. It gives a list of some of the more important kinds of goods which the company regularly buys.

Others than salesmen are favorably impressed with the policy as shown by this room. A customer of the company was heard to say: "Any concern which is as thoughtful as that of visiting salesmen can be depended upon to be fair and considerate to its customers."

**Who greets your customers?**

A real estate operator values the good will of the office callers so highly that he will not take any chances of giving them a bad impression.

"I feel that I can't afford to remain shut up behind a door marked 'Private'—to have an office boy or girl meet my customers and tell them that I'm busy," he declares. "That would be too expensive. I always greet a caller, whether or not he is a customer, and find out what he wants. After I have established cordial relations with him, then maybe I can afford to turn him over to some of my clerks.

"Perhaps the reason more business men do not follow my plan is because they have an exaggerated idea of the importance of giving personal attention to details. Of course details must be attended to, but in most concerns they can be handled by clerks if the office is properly organized.

**This man meets customers himself**

In my business I believe customers are the most important, and that's why I want to win them in the first place, and keep them afterward. I cannot afford to have some office boy, who may happen to be tired, or in bad humor, or inflated with the importance of his job, offend a customer, while I am occupying myself with less important matters. Moreover, I think it is annoying to a customer to stand in front of a railing and wait until somebody gets ready to notice him.

This man's policy, however, is uncommon. Many executives who have a large number of callers find it best to use their outer offices as buffers against undersirable callers. The successful system is the one that can do this and still not offend.

Nearly every man has at one time or another had his time wasted by the caller who outstays his welcome. A busy western executive has devised a plan which has proved very effective in conserving his time without offending callers, or even without their knowing that a definite method has helped shorten their call.

**A plan which protects the executive**

This executive's desk is separated from that of his stenographer by a clear glass partition; and it is her duty to see that callers do not take up too much of the executive's time. This executive keeps three books in a convenient drawer of his desk.

**A simple code for the secretary**

One of the books is bound in red, one in blue, and one in yellow. When anyone is shown in, if he is an important caller and the manager does not care to be disturbed, he casually places the yellow book on top of his desk where the stenographer can see it. If the visitor has real business to transact, and yet the manager is open to interruption if there is any matter urgently demanding his attention, he puts the red book on his desk. Then the stenographer feels at liberty to interrupt at any moment. If the visitor turns out to have nothing worth while to say and still stays on, up goes the blue book, whereupon the stenographer knows it is her duty to interrupt with some business so urgent that the visitor will take the hint and go (Figure 112).

A purchasing agent for a southern firm makes a point of not letting salesmen into his office unless he is pretty certain he wants to see them; and yet he arranges to give every man a hearing. His office is separated from the outer offices by a clear glass partition, but the office is so placed that from his desk he can see anyone who calls. If a salesman whom he knows and with whom he wants to talk comes, the girl at the information desk sends him in.

**How undesirable callers are shunted quickly in one office**

But when some salesman whom the buyer does not happen to know calls, he follows a different plan. He has had a telephone placed in the reception room. When the girl announces the second type of caller, the buyer instructs her to connect him with the caller by means of the telephone in the reception room. The girl simply asks the salesman to talk with the buyer over the telephone. Usually the buyer can size up the man at a glance—for he can see him through the clear glass partition. But he also gets the man to tell at least part of his story over the telephone, and he can then decide whether or not the matter is one about which he wishes to have a personal talk. In case it is, the buyer can easily invite the salesman into his office. It it is not, it is easier to break off a telephone conversation courteously than a personal talk.

In a real estate office where several salesmen in rotation meet the prospects who call, the usher sometimes found it hard to tell which salesman was to receive the next

**Making sure that customers see the right salesman**

visitor. Each salesman has his own small office partitioned off, and occasionally the usher would make a mistake and conduct a prospect to a salesman who was already in the midst of an interview. These interruptions might hurt the canvass, besides often giving the caller the idea that the firm's methods were unbusinesslike.

To overcome the difficulty, a dummy electric light fixture has been prepared to serve as a signal. It rests on top of the six-foot partition posts between the salesmen's offices. It is not attached in any way, and can quickly be moved from point to point.

The salesman who is to receive the first caller places this little dummy fixture—which, by the way, has a celluloid orange in place of the electric light bulb—above the corner post of his office. As soon as the first customer comes in and engages this salesman's attention, the salesman who is to receive the next caller places the little fixture over his office. It can be seen from all over the room, and immediately notifies the usher to whom the next visitor should be taken.

## CHAPTER XVI

# SPEEDING UP THE MAIL

**You'll agree that no saving is too small to count**

IT'S worth the while of any concern to save 2 cents 300 times a day. That's what this concern did in handling its mail. While in a smaller office it may not be possible to save as much, it's bound to be easier to find and stop the wastes that do exist than it is in the larger ones.

Fifty 2-cent stamps represent a dollar; envelops and addressing cost money. Yet effective standardized mailing departments are astonishingly scarce.

One concern did most of its business through some 200 agents or dealers. A mail clerk noticed that every day several envelops were received in the same mail from each of a large number of these agents. Perhaps each envelop from the same dealer would contain only one or two orders or letters; and, while the envelops were mailed at different hours during the day, train times and distances were such that all reached the home office in the same mail.

**What an investigation of postage costs in one office uncovered**

As postage was one of the expenses that the firm paid for its agents, the waste was of dollars-and-cents importance. As a result of the clerk's observation, a record was kept of all mail received during a certain time. The record showed: (1) the number of envelops received from all agents in each mail; (2) whether one envelop would have carried all the matter from the agent without additional postage. This is what the study showed.

1. An average of 1½ envelops came in the same mails each day from each of the 200 agents, under 2-cent postage.

2. The duplicate envelops almost always contained pages which could have been enclosed with other mail from the same man without excess postage.

3. Therefore, the waste was represented by one half of 200 envelops and 200 2-cent stamps a day; or, 100 2-cent stamps, with a

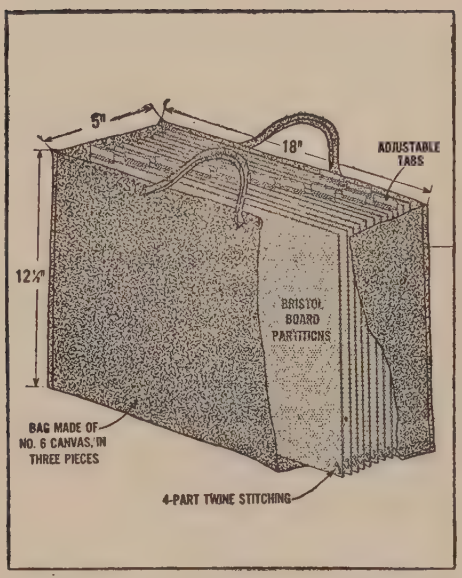



FIGURE 118: This canvas bag is in reality a traveling post office that lightens the labor of the mail boy, and, what is more important, it speeds up the delivery of the office mail.

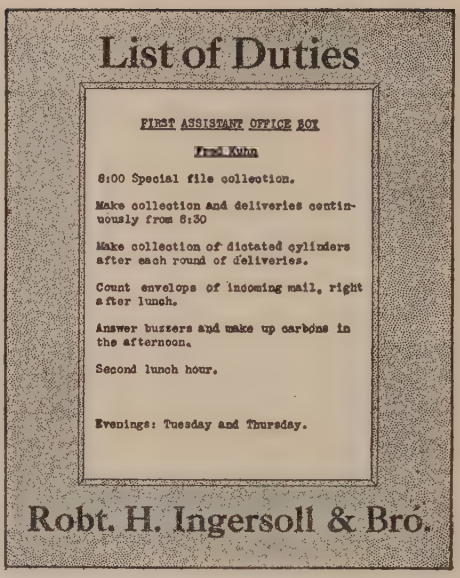

List of Duties
FIRST ASSISTANT OFFICE BOY
Fred Kuhn
8:00 Special file collection.
Make collection and deliveries continuously from 8:30
Make collection of dictated cylinders after each round of deliveries.
Count envelops of incoming mail, right after lunch.
Answer buzzers and make up carbons in the afternoon.
Second lunch hour.
Evenings: Tuesday and Thursday.
Robt. H. Ingersoll & Bro.

FIGURE 119: The duties of every position in this office are carefully listed, so that each worker knows exactly what is expected of him. It does away with "I didn't know."

**INTER-OFFICE COMMUNICATION**

Addressee Frank Smith Subject Farson & Co

Department Production Date 6-20-18

Please comply with, or note number checked below

| | | | |
|---|---|---|---|
| | 1 Reply to my letter of | 9 | See letter of dated and explain |
| | 2 Send | 10 | Complying with your letter herewith find copies of |
| | 3 Furnish immediately billing price | 11 | Attached find bill rendered on informal order Forward to customer with request for formal order |
| | 4 Enclosed find C. O. D. bill requested in your letter of | 12 | Refer to bill and furnish Correct customer's order number |
| | 5 Furnish car number and reshipment date | 13 | Has requisition been billed complete |
| | 6 Furnish correct reference | ✓ 14 | When will shipment on order be made? 1463 |
| | 7 Note below information asked for in yours of | 15 | Refer to requisition and furnish bill number |
| | 8 Furnish further information or details of allowance covered by your credit number | | |

June 30th

Order Department

Per John Jones

FIGURE 120: One concern found that 15 messages would cover most of the routine correspondence between its departments. So to avoid writing the messages over and over the form above is used. It is now seldom necessary to write out a message in longhand or to take a stenographer's time for it. Short cuts like this are worth while in most offices.

value of $2, plus the cost of envelops, addressing, and mailing—about 35 cents. Counting 300 mailing days in a year, the annual postage waste by agents was a little more than $700.

**Putting mailings on an effective schedule**

This led to an investigation of the methods employed in sending out mail from the home office. Agents were requested to keep all envelops received in the mail from headquarters during a given period, and to return them at the end of the period to the home office. The returned envelops were checked over and tabulations made.

The fact clearly disclosed was this: There was almost no fixed schedule for mailing, and outgoing mail was stamped and put into the mail sack just about as it came to the mailing desk. The tabulations indicated that the loss on the firm's mail as it went out was about equal to the loss on the incoming mail—some $700 a year, or a total annual postage waste of about $1,400.

**Looking up train times was the first step**

Steps were then taken to standardize the mailing. In cooperation with the post office and the agents, a list was readily made up of all mails out of and into the firm's own city, and each city where an agent was located. Also, it was determined at what hours mail normally reached the agent when mailed at certain hours from the home office; and, similarly, at what time it reached the home office when sent by the various agents.

For example, it was found that mail leaving the home office at 8:30 in the morning went out on a train reaching New York City in time for delivery the afternoon of the day following; and that mail leaving at any later hour did not reach New York City until the morning of the second day following. From the data gathered in this way, a schedule was prepared to govern the hours at which mail for agents should be sent out, about as follows:

| | Send Out Mail | | | |
|---|---|---|---|---|
| For | A. M. | | P. M. | |
| New York City | 8:30 | | 5:30 | |
| Cincinnati | 8:30 | 11:45 | 5:30 | |
| Atlanta | 8:30 | | 1:30 | 5:30 |

**Each saving is multiplied by 200**

This schedule, of course, was made out to cover all of the 200 cities in which the agents were located.

No matter how small your business is, there doubtless are several cities to which much of your mail goes. If

**—and the total savings was $1,400 a year**

so, it may be worth your while to make up a table such as this to be sure that there will be no unnecessary delays in getting the mail to its destination.

As a result, mail for the New York City agent which had been theretofore sealed, stamped and sent to the post office perhaps five times each day, now went out but twice a day and still reached its destination as early as under the old system.

At the same time all agents were notified at what time mail should be sent from their respective cities to reach the home office in the quickest and most economical way. They were asked to cooperate to reduce the postage bills.

Occasionally, mail trains and deliveries change, and revisions in the standardized schedules become necessary, but such changes are infrequent and easily noted. And so, at almost no expense, and with an actual saving of work, this standardization reduced the firm's postage bill some $1,400 yearly—more than $4 for each working day.

**Why postage costs should be considered in designing mail matter**

Another house, with a bulky mail each day for numerous branches, found that the use of a lighter weight of paper for letterheads, forms, and envelops, effected a big saving in postage.

Too frequently a lot of needless waste occurs in mailing advertising matter which has been prepared without considering postage. Often circulars prepared for enclosures with letters are afterward discovered to be so bulky that the letter requires excess postage. Catalogs, again, are often printed on heavy paper, when a lighter weight stock would secure the same printing effects and be just as serviceable, with important postage economies. Postage should be given some thought in designing the size, shape, and make-up of any advertising pieces.

**Perhaps by freight or express would be the best way to send your catalogs**

Many large catalogs sent by mail could more economically go by express, at least to some points. One firm which sent out large quantities of such matter reduced the delivery expense about one fourth through sending by express at catalog rates. Some of the mail order houses send catalogs by freight to each town where a large number are to go. They arrange for their distribution through some local deliveryman, and sometimes through the telegraph messenger boys.

FIGURE 121: Trays like these may be kept in the different departments to receive the mail as it is ready. The truck takes the trays to the mailing room as often as is desirable.

FIGURE 122: In his spare time this boy addresses envelops to the branch offices and factories with a rubber stamp, thus saving the more expensive time of a stenographer.

*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 123: Does every outgoing letter have its separate envelop? When, as often happens, several letters in each mail go to the same addressee, it may pay to sort them out and combine them under a single stamp. A sorting rack like the one shown here makes this easy. It is declared that the saving in postage amounts to a considerable sum.

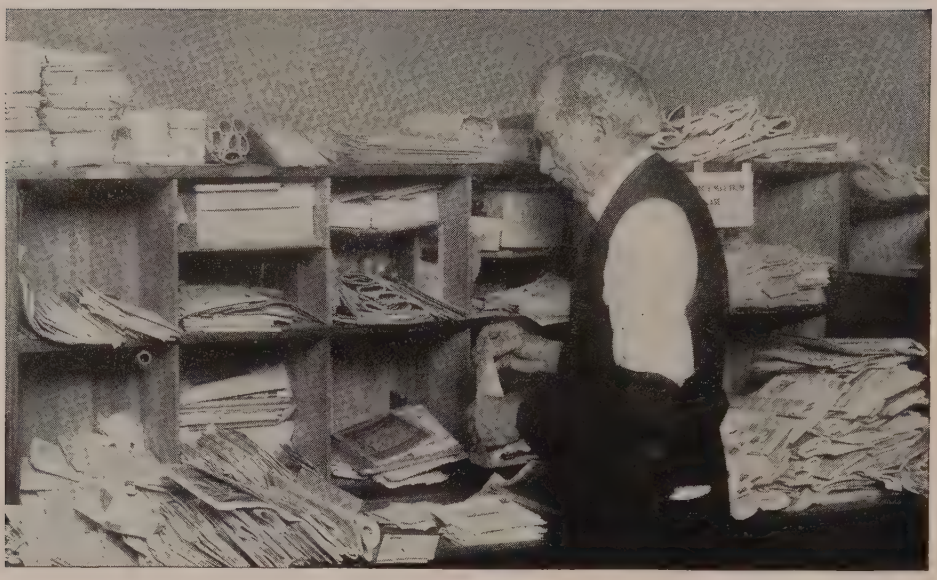


FIGURE 124: How many of your expensive booklets are there in the "not found" department of the post office shown here? Unless the words "return postage guaranteed" appear on the wrapper, you may be throwing away a lot of money every year. This is one of the wastes that may come from improper mailing, and unfamiliarity with postal laws.

FIGURE 125: Sometimes it takes mail as long to reach the right man in the office as it does for Uncle Sam to carry it a thousand miles. If letters are glanced over by employees who "know the ropes" and are referred to the right person when they come in, inconvenience and possible losses from a delay are pretty certain to be eliminated.

**Sometimes machinery will save on mailing cost**

A worth-while saving can usually be made by having the office boy, with a set of loose rubber type, address envelops and wrappers for regular correspondents; or, they may be press printed, or stenographers can get them out in their spare time. These envelops can be kept in stock in the mailing department and save not only envelops and stamps, but also the stenographers' time.

It may not be amiss to note here that now and then forms are printed on stamped envelops and postcards, and for some reason they are not all used. Though it is perhaps not generally known, the post office will make a refund at a moderate discount, if the surplus is presented and the refund requested.

The use and the proper care of modern mailing appliances—letter folders, envelop sealers, stamp affixers—also effect real economies, especially where the volume of mail is considerable. Not only are such devices of great use for regular mail, but they are particularly helpful where quantities of circular matter are sent out, catalogs and so on.

Setting standards in a mailing department does not require a thorough investigation into government mail service. What is needed is a little common sense study of conditions in each individual town or city, and each office. The outcome is pretty sure to be increased profits no matter how small the office.

**It's important to answer mail promptly**

It has been estimated that by far the greatest part of all business is transacted by mail. It follows, therefore, that the success of a business may depend largely upon the speed, accuracy, and economy with which its mail is handled. The speed with which an incoming letter goes through the necessary routine, and a reply is started, may often be the deciding factor in keeping an old customer or getting a new one.

The first step in expediting a reply is to make sure that the incoming letter is referred to the proper person or department. In an office receiving only 100 or so letters a day this will usually be done by the managing officer or proprietor. Besides being the one best able to refer the letter correctly, he is thus kept in touch with the business.

**How incoming mail is routed in one concern**

Well-understood routine takes care of the opening and distribution of the mail in good-sized concerns. The postal organization inside such companies, from sorting table to filing section, often compares favorably with the organization the Post Office Department maintains for classifying and distributing mail.

In an eastern house which does a limited mail-order business, the correspondence manager looks over all incoming mail, and marks the letters for the departments to which they are to be delivered. The departments are numbered and the manager makes notes, by number, showing to which department a letter is to go and the order it is to follow.

For example, the accounting department in this concern is numbered 2, the art department 4, and the general manager 1. The number of the manager of correspondence is 3. If a letter should go to the accounting department, then to the other departments in the order named, it will be marked 2—4—1—3. If there is any reason why the letter should make the rounds within a certain limited time, the correspondence manager usually writes his number at the end of the list of departments to which it is to go, and makes memorandum of the date upon which it must be returned.

**It pays to determine the quickest way to distribute mail**

This method is a simple and obvious way of solving the problem of mail distribution in a relatively small office. In many a larger firm, the problem of routing the mail and seeing that it goes through on schedule time is a more serious task. The mail, in many concerns, is the "feeder" for all departments, the connecting link between house and customer.

Whenever a shorter or better method can be applied, therefore, it helps reduce friction, and secures greater efficiency. In the plant of a blank book and printing house a rubber stamp is used which prints the names of the various departments and at the same time shows the hour upon which the letter is received. If the letter is to go to but one department, a pencil check after that department indicates this fact and it is put in a basket for that department. The pencil check saves the time of the man who marks the mail in case the letter goes into the wrong basket for distribution; for if any depart-

FIGURE 126: The "fast mail" in this office is carried by a boy on roller skates. Where distances are long as in many factories this plan is often worth trying at least, you'll agree.

FIGURE 127: Rapid transit of mails is assured in another plant by putting the mail boys on bicycles. Long runs in a one-floor plant may make this plan economical.

FIGURE 128: Mailing machinery helps in getting out a heavy mail on time. Many concerns find a postal scale almost indispensable, even when only a few letters pass over it daily. Volume of business regulates the extent to which such equipment can be used profitably. Some losses that may occur where postage is guessed at are described on page 241.

FIGURE 129: In one office the clerk whose job it is to see that mail gets to the right man quickly, is chosen because of his good memory and his knowledge of office routine. But he keeps a card file of the business on his desk so that if his memory fails him he can find out quickly where a letter should go. Note the convenient location of the file at his left.

ment receives a letter intended for some other department, it knows at once from the checkmark where it belongs.

**Another way of routing mail**

When the letter is to go to several departments, numbers are written after the department names to indicate the order in which the letter should move from one place to another.

In a wholesale house it is the custom to indicate which department must see a letter by pinning to it a pink slip—a color which attracts attention—with the names of the departments to which it is to go printed thereon. Immediately in front of the department name is a numerical indication of the order in which the letter shall go from one department to another, and each department head is required to make a memorandum of the hour and day when the letter leaves his hands for the next department.

In this manner it is possible, when there has been unusual or needless delay, definitely to fix the blame for it; and as a result, there is much less delay than formerly. In cases where letters must for any reason be rushed through, the executive who routes the mail through the house writes the words "rush" at the top of the pink slip.

**Flagging attention to important mail**

The knowledge of the employees that delays can be traced to those responsible for them has resulted in the custom of handling "pink slip letters" first. The president of this company says the plan of requiring each to note the time when the letter left his desk has more than cut in two the average time required for a letter to make the rounds.

It is important, many times, that certain departments in a concern should know without delay the contents of incoming mail. In a wholesale dry goods house an interesting system has been adopted for giving the head of the advertising and correspondence departments instant information concerning the correspondence of customers.

A method somewhat similar to those described was at one time used for routing the letter through the office, but the correspondence man found that he often wrote to a customer between the arrival of the customer's letter in the house and its arrival at his desk, due to the letter being delayed in other departments. His letters might have been different had he seen the letter from the

**Making sure the right man gets the letter**

customer before writing. In some cases of this sort, his sales letters indicated serious lack of information about the customer.

Occasionally, too, the credit man wrote dunning letters when the customer's remittance had actually been received in that day's mail.

The system now used is to write the name of the customer on a red, blue, yellow, or white slip of paper, depending upon whether the letter from the customer contains an order, a complaint, an inquiry, or is general in character. These colored slips are sent to the various departments interested and act as flags to warn them to hold off writing to these customers until the exact character of the letter from the customer is learned when the letter is finally referred to the department on its round of the office.

Many differing methods are used by firms to insure that letters to them will be addressed for the attention of the proper man. One plan now in successful use is to enclose with a letter a small, gummed red label, bearing the correspondent's name and department number. Just over the name appear these words: "Please attach this label to your reply so that I can give it personal attention at once."

**Getting customers' cooperation**

The odd appearance of the label attracts attention. The labels are used only when a reply is solicited, and it is the experience of this house that replies not only come in more promptly, but nearly all bear the labels, thus insuring transmittal without delay to the right correspondent. The saving in time to the customer, who needs only to detach and stick the label to his reply, is not less important than the saving for the house.

Once it has been decided to which men or departments a piece of mail is to go, it is essential that it get there quickly. This duty usually devolves upon mail boys, who may be more or less prone to shirk and loiter, and it is therefore best that close supervision be kept over the interdepartment mail service.

On account of the floor area to be covered, and the number of offices to be visited, the mail messenger in a Pennsylvania factory could make a trip only once every half hour, and consequently it took from half an hour

FIGURE 130: Unless closely watched, mailing lists may mean considerable money wasted on stamps and printing. They cause the postmasters trouble, too. That's why many of them are willing to cooperate and check over your lists for you now and then, and so help you keep them up to date. Why not see your postmaster if your lists need revising?

FIGURE 131: If you sell by mail, it may be well to check up now and then and look for leaks. One concern found, for example, that its product sold as well when advertised under one-cent postage as under three. Another found that a change in packing his product gave him the advantage of the lower parcel post rate, with a resulting postage saving.

FIGURE 132: These eight department heads meet every morning after the mail has been opened, but before it has been referred to the proper correspondent. They discuss the more important letters such as those affecting policies, and those bearing on deliveries and thus arrive at decisions quickly. This does away with referring from one man to another.

FIGURE 133: Making up and checking lists of prospects is an important job in many offices. It may take up only a small part of one man's time or, especially in a mail-order business, several employees may be kept busy all of the time. Lists that are not kept up to date are liable to be expensive, and they are very likely to cause a lot of trouble, as well.

to an hour for one office to refer a paper to another, and frequently much longer. After carefully studying the best order in which to visit the offices, and cutting out all lost time due to bad routing, it was found that the real difficulty lay in the delay incurred because all mail had to be brought to the chief clerk for distribution.

**One traveling post office**

The plan of providing a traveling post office was finally hit upon, which has cut in two the time of sending a piece of correspondence from one division to another. A simple canvas bag was made, as shown in Figure 118 on page 224. This bag is rectangular in cross-section, and is divided into pockets by bristol board partitions, one pocket for each office.

**—saves time in this way**

The bristol board partitions are tabbed with the subdivisions in the order in which the messenger's round is made. The messenger distributes mail directly to the pockets of this bag from the outgoing basket in each office, instead of carrying the correspondence back to the chief clerk's office for distribution, and leaves the contents of the proper pocket in the incoming basket of the office concerned.

In this way the maximum time necessary for a piece of correspondence to pass from one office to another is the length of time it takes to make the round—and the average time is one half of this maximum. A further advantage is that the messenger can handle more mail than he formerly could without the danger of mixing up the mail intended for different offices.

**If your mail is heavy this plan may work out best**

To save time and labor in an office having an exceptionally heavy mail, the manager has devised a simple but ingenious wagon for collecting letters at regular intervals from the various departments. The device, shown in Figure 121 on page 227, consists merely of four wooden trays, about two and a half feet long and a foot and a half wide, which are set into a metal framework. The uprights are fitted with casters so that the truck may easily be rolled along the corridor and into the offices where the outgoing mail is to be collected. The wagon is simple in construction, and may be built to suit individual needs. In offices which have a heavy mailing of catalogs and circulars, these trucks are particularly useful.

**Checking up on the mail boys**

In a smaller office, outgoing mail was collected from the baskets every half hour. The office boy grew careless and it was difficult to tell just when the mail was going out on time and when it wasn't. To overcome this, a special blank was placed in the bottom of each basket. Now, as the boy comes around, he marks the time, and places his initial beneath, thereby leaving a definite record and insuring promptness. This plan should work well in any office employing mail boys.

A somewhat similar plan is in use in a factory office well known for its smooth operation. The baskets are emptied every quarter of an hour by the following system: A set of cards is used for every delivery; each set comprises as many cards as there are baskets on the route. Each card is marked with the time of collection, as "This basket was emptied at 8:30 a. m." Each boy has a certain number of baskets on his route, and he is held responsible for all collections from and deliveries to those baskets.

**Why regular collections are important**

In each basket is a card which indicates the time of the last delivery. When the messenger takes the letters out of a basket, he leaves a new card in it to cover that delivery. In this way, there is always a card to show when the last collection was made from every basket. Each boy must turn in his quota of cards after a round trip. This scheme insures regular collections from all baskets.

In sending memoranda from one department to another great formality is not required, but the practice of scribbling an answer to a letter on the bottom and returning it to the sender cannot ordinarily be recommended.

**One way to handle intra-office mail**

There are points in its favor, however, when used in the right place. One concern has adopted the practice of writing all interdepartment letters in triplicate and sending the original and one carbon to the addressee. A piece of carbon paper and a lead pencil will answer five such letters while one is being dictated. The carbon copy, with the carbon copied answer, is retained in the answering person's files. This requires the writing of but one letter, and, as the originally retained carbon copy may be destroyed, the filing of but two pieces of paper instead of four. Each of them is an exact duplicate of the other and they form a complete record.

**From Treasurer's Office**

Date Jan-3-1918 Referred to

| | |
|---|---|
| Mr. Burke | Mr. Marshland |
| Mr. Casten | Mr. Mitchell |
| Mr. Carson | Mr. O'Toole |
| Mr. Currie | Mr. Olson |
| Mr. Dawes | Mr. Orkney |
| Mr. Davenport | Mr. Peterson |
| Mr. Eskridge | Mr. Richards |
| Mr. Funston | Mr. Ralston |
| Mr. Farlow | Mr. Sargent |
| Mr. Franklin | Mr. Spellman |
| Mr. Fotheringham | Mr. Varley |
| Mr. Gaston | Mr. Walsh |
| Mr. Harris | Mr. Weston |
| Mr. Hill | Export Department |
| Mr. Horsdam | |
| Mr. Jack | For attention |
| Mr. Lawson | For filing |
| Mr. Larkin | For reply direct |
| Miss Low | For approval and return |
| Miss Moore | For comment and return |
| | For report and return |
| | For reading and return |

FIGURE 134: Here is a ready-made address and instruction sheet which the mail clerk in one office attaches to all incoming mail, thus insuring prompt attention and consideration.

Trans. to Date 15/2-8

| | | |
|---|---|---|
| | REVIEW | ad lib |
| | Explain | See Sender |
| | Approve | Order |
| Look Alike | | Verify |
| Deliver to | | |
| Return to | | |
| For Ref. | | Wanted |
| Thoroughly | | Comments |
| | | Acknowledge |
| | | To be Paid |
| | Copy | |
| Index | | File |
| Mail | | Destroy |
| ~~A B C D E~~ | | |

FIGURE 135: This "trans" slip saves much useless writing of notes. It is attached to letters and other papers and tells the workers exactly what disposition to make of them.

## WINDOW ENVELOPS INSTRUCTIONS FOR FOLDING

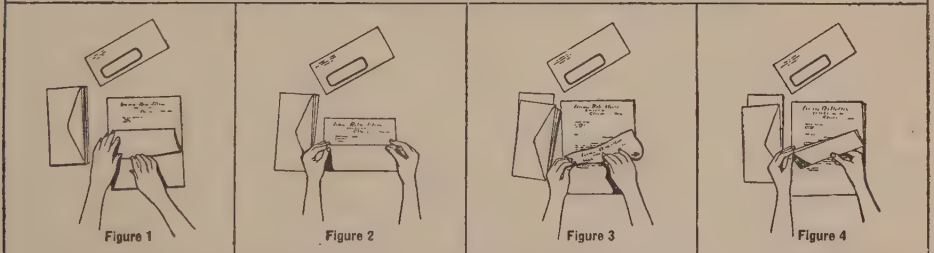


Figure 1 Figure 2 Figure 3 Figure 4

Fold bottom over to top of salutation as shown in Figure 1; this marks line where second fold is to be made

Pick up letter as described by Figure 2, holding firmly with left hand while making fold with right, moving hand from left to right as indicated by arrow in Figure 3

Hold letter in same position with left hand while grasping under edge with right (see Figure 4). Then turn address side down preparatory to placing in envelop

Envelops should be placed face downward alongside of pile of letters, with flaps next to letters as shown in illustrations, Insert enclosures as per Figure 5

Figure 5

*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 136: There is usually one best way for performing almost any operation, and this illustrated sheet of instructions covering the use of window envelops shows the care which one concern takes to instruct its employees in the one best way. Many office operations that are now poorly done might be improved by the same means, no doubt you'll agree.

**Many offices might use this plan to advantage**

To reduce stenographic expense, one firm has developed the form shown in Figure 120 on page 224. On this sheet is a list of questions and statements comprising the majority of subjects treated in interoffice letters. Like an election ballot it has blank spaces at the left for checkmarks. Its use is very simple. For example, if a customer requests definite shipping dates on his order, the clerk in the order department addresses one of these forms to the production department, checks item number 14, and inserts the customer's order number. The man in charge of factory production records notes his reply in the blank space at the foot of the sheet and signifies that the letter is to be returned to the order department by circling the order clerk's name with a pencil ring. The form is thus made to serve the purpose of two interoffice letters, without requiring any loss of time for dictation and writing.

**It pays to get all letters to a single concern together for mailing**

The department which actually sends out mail is sometimes prolific of small individual losses which may easily add up into large totals. Even though the outgoing mail consists largely of dictated letters these losses may creep in. If the mailings are large, and consist of circular or form letters, the losses may be extremely large. One office found that there were about 25 firms to whom, each day, it was mailing from 3 to 15 letters and orders. As these letters originated in different departments it had been customary for stenographers to address a stamped envelop for each letter or order. This was stopped and now large manila envelops are addressed and the mail is sorted so that all mail for the same addressee is put into one envelop. A convenient sorting rack for the mailing department is shown in Figure 123 on page 227.

**Checking up on the stamps used**

Thoughtlessness on the part of employees in using an occasional stamp for personal mail will soon total into dollars.

"For handling stamps in our office," says the manager of an advertising firm which has solved this problem, "we have a simple and effective method. In our mailing room a thoroughly competent clerk is in charge of stamping and mailing. He keeps the stamp box locked. All members of the office force who want stamps must

sign a requisition approved by the department manager.

**Do you know the government postal rules?**

"When the mail is being sent out the stamp box is placed open on the table, and all the boys doing the stamping help themselves. After the letters are stamped they are counted and checked up with the number of stamps remaining in the box. The balance of 'stamps on hand' and ' stamps used' is seldom much out."

A study of the government postal regulations will often show the way to a saving in postage. This was the case with a music dealer who had been mailing sheet music in packages which weighed about 3 pounds. At the third class rate the packages cost 24 cents. Because they failed to come to 4 pounds he could not get the parcel post rate on them. It was suggested to him that if he packed the sheets with a board, they would arrive in better condition, and he could thereby bring the weight up to 4 pounds, and could take advantage of the parcel post rates. He has done so. The packages now weigh 4 pounds and go for about 8 cents.

**Sometimes this rule will enable you to save**

Before trying the plan, he submitted one of the packages to the local post office and was informed that it was properly a parcel post package. The local post office authorities knew of the loss to the post office, but said that the law was plain, and that the music publisher had a perfect right to mail such a package.

In order to get proper postal classification the mailing department of a Massachusetts concern places on all large envelops that go out under first-class postage one or two yellow stickers bearing the words "letter postage." Formerly it was found that bulky letters were sometimes considered as third-class mail by the postal clerks, regardless of the amount of postage paid.

Another typical cause of postage waste was uncovered by a Minnesota concern.

**Does your mail clerk follow this plan?**

"I can tell by the feel of a piece of mail how much postage it requires," the mail clerk boasted to an executive who was on the lookout for losses. And so he could. A trial proved him a good guesser nine times out of ten. The tenth time, however, cost the firm a good many dollars each year in wasted postage, not to mention the unpropitious mood into which "postage due" letters might throw recipients.

**Two common but vivid examples of postage waste**

This concern has found it pays to have a poor guesser and a good weigher at the mail desk. Scales cost but little, and the trouble involved in using them has been found slight in comparison to the saving gained.

"Considering postage waste," says another busy executive, "my morning's mail has two common examples. One letter, coming first class, has 3 cents postage on it. The clerk, ignorant of an important postal regulation, was probably in doubt, and put an extra stamp on for safety, when the letter should have gone for 2 cents. In another instance there was a loss of 2 cents. A clerk, as lax as the first one, placed an additional stamp on a letter forwarded to me. Ignorance caused one loss and carelessness the other. The total loss which such employees might make in a year if not properly supervised is certainly worth considering."

Many concerns fail to pay sufficient attention to the revising of their mailing lists—and lose a good deal of money thereby. It is often possible to send the mailing list to the various postmasters with a request that they check the lists and strike out the dead names as shown by their records.

**How to keep mailing lists up to date**

This service of correcting mailing lists is optional with postmasters. But they are often not only willing, but glad, to do the work for the sake of not having a lot of undeliverable mail matter sent to them. A publishing house finds it gets good results by sending with its mailing lists tactful letters addressed to the different postmasters. This letter, for example, was recently used:

> We wish to ask a favor — one which we know will result in mutual benefit. It is our aim to keep our list of customers as nearly 100% correct as possible, which means less undeliverable and unclaimed mail for you, and less wasted postage, correspondence, and printed matter for us.
>
> We have carefully prepared the enclosed — will you kindly look it over, making any corrections that suggest themselves to you, such as crossing off the names of those who no longer receive their mail from your office, and so on? (For authority for complying with our request please see Section 547, Page 270: Postal Laws and Regulations.)

Getting postmasters to cooperate

> In a few instances where the post office clerks have been very busy, rather than wait until they had the time during office hours to correct our list we have preferred to pay them 30 cents an hour for overtime work, as we contemplate a number of large mailings in the near future, and would like to have our lists corrected before we make them. Therefore, if absolutely necessary, you may work on this basis and render bill with the completed list.

Seventeen hundred of these letters were sent out, and only one postmaster refused to do what was asked of him.

A good way to avoid waste and at the same time keep the mailing list up to date, is pointed out by a well-informed official.

"There are easily 75,000 or 100,000 circulars destroyed every day in the large post offices in the United States," he says, "simply because they bear no local address and the addressee is not known to the post office employees. It should be borne in mind by advertisers who send out large numbers of expensive circulars that circular matter is not given the directory service that letter mail receives. Undeliverable circulars are invariably destroyed.

How to use the return-postage privilege

"It is a simple matter to take advantage of the return postage guaranteed privilege, but many advertisers fail to do so, and lose money thereby. Under this provision it is possible to get your circulars back again by inserting in the return card the words return postage guaranteed, notify sender and return postage will be sent, or a similar order. Such circulars are not destroyed, but are held out, and the sender is notified as to the number held and the postage necessary to get them back. On receipt of this amount in stamps, they are returned to their owner by the post office authorities. Simply in order to keep dead names from his mailing list, the advertiser should keep careful check on this matter. Constant pruning of dead names from the list, in this way, will save many stamps, and perhaps half an issue of a circular before a year is out."

## CHAPTER XVII

# RUSHING ORDERS THROUGH

**There should be a worth-while idea for you in this plan**

HAVE you ever lost a customer through avoidable delay in filling his order? This often happens in the smaller offices where a routine for handling orders has not been worked out. It is in just such offices with a force of from two to a dozen employees, where the duties of each may not be well defined, that hit or miss methods are likely to result in slow handling of orders, with consequent dissatisfaction to the customer.

The system developed by Montgomery Ward & Company, for handling 35,000 orders a day with a small percentage of errors, should be suggestive to concerns so small they have but one thousandth as many orders, whether or not they conduct a strictly mail-order business.

Of course it might not be possible to adapt this system, as it stands, to all businesses, but this description ought to give any business man valuable ideas for systematic handling of orders.

The slogan of Montgomery Ward & Company is "ACCURACY." Posters bearing this single word in eight-inch letters are displayed in all departments. But speed, although it is not emphasized to the same extent, is not less essential. In the so-called mail-opening and entry divisions, and the central pit, which are responsible for all clerical operations connected with an order from the time it is received until it is ready to be filled, packed, and shipped, both speed and accuracy are attained.

**Measuring the incoming mail**

It has been found that the weight of the first morning delivery of mail is a reliable index to the number of orders that will be handled during the day. In other words, the morning mail is an approximately constant fraction of the mail for the entire 24 hours, and 1,000 pounds of mail can be depended upon to contain a given number of orders. This is not mathematically exact; but it

varies so little that when the weight of the early mail is reported to the superintendent he can determine at once, with reasonable precision, how many men he will require that day for assembling, packing, and shipping.

**Why it's well to separate mail for the different departments at the start**

Employees of the mail-opening division report for duty at 7 a. m., one hour before work begins in other departments.

After the mail has been weighed, and before it is opened, customers' mail is separated from the general mail of the house. The envelop is a sufficient guide. As a rule, letters from customers are received in plain envelops or in the company's printed addressed envelops which have been distributed with catalogs and order blanks. General mail is usually received in envelops bearing the return address of another house. Mail of the latter class is transmitted at once to the division apparently concerned. For example, a letter from a meat packer would go at once to the grocery division, and a letter from a manufacturing hardware company to the hardware division.

Customers' letters are sorted by states of origin into a case with appropriate bins or pigeonholes, and from this point, until the letters leave the division, the segregation by states is maintained. There are various reasons for it. One is that the orders are to be routed an hour later in the entry division; it would be difficult for a single route clerk to handle competently and promptly orders destined for all parts of the country. This method of division is also found convenient in the compilation of sales statistics.

**Machinery is often effective in handling heavy mail**

After it has been sorted by states, the mail is run through a letter opener, to which a canceling machine is hitched as a feeder. This machine delivers the letters one at a time at high speed to the opener, where knives pare a thin strip from the top of the envelop.

The letters are then distributed in batches of 70 or less, all from one state, to mail-openers. These girls weed out the orders with remittances from the no-cash mail. The latter, averaging 20 pieces in a batch of 70, and consisting of requests for catalogs, inquiries, or complaints, are passed to a reader, who examines them more carefully and sends them to the proper divisions.

**How every item is carefully checked**

On all orders the mail-opener notes with a blue pencil the amount of the enclosed remittance, with an arbitrary abbreviation to indicate whether it is in the form of cash, check, postal money order, express money order, stamps, or currency. She also compares the amount actually found enclosed with the amount as stated in the customer's letter. If there is a discrepancy, she refers the case immediately to her supervisor, who relieves her of further responsibility. To prevent confusion, no other employee in any division of the house is permitted to use a blue pencil. A blue pencil notation invariably means a cash enclosure, as found by the mail opener.

The batch of orders, opened and stacked, with each remittance on top of the order to which it belongs, passes from the mail opener to a checker at an adjacent desk, who verifies the mail opener's notations and carefully examines all remittances. It is her duty to catch checks which are unsigned or improperly made out, defective money orders, and counterfeit money. She also acts as a cashier, for when remittances are regular and in order she holds them until the close of the day.

Following the checker, a pinner takes over the orders, and pins each of them into an invoice folder. This is an ordinary manila sheet folded over one inch at the top. It bears a printed serial number, which becomes the invoice number of the order, and serves to identify it at any future time.

**Keeping track of remittances**

All of the orders belonging to the one lot are arranged now in numerical sequence, and are given to a clerk, who lists and totals them on an adding machine, reading the amounts from the mail opener's blue pencil notations. She also prints on the slip the checker's identification number, an arbitrary number denoting the state of origin, and the serial invoice number of the first order listed, from which the invoice number of any following order can be readily ascertained if required. The daily slips for each state are bound separately, and become a permanent record of receipts.

Finally, a girl operating a non-listing adding device makes an independent addition of the orders, which she checks against the total of the listing machine slip. If the two totals agree, this particular batch of orders is

FIGURE 137: Wrapping bundles can be standardized to save materials and time. The conveyor to the rear of the wrappers takes the bundles away. This is one of the departments of the mail-order concern mentioned on page 244. Many other good office methods tie back closely to the warehouse or factory, but what's the difference, if they are effective.

FIGURE 138: When the various items that go on one order have been picked out of the stock rooms, they go in baskets down a chute to this department where they are checked against the order and assembled in the bins, ready for packing. The carefully worked out office routine reacts on the shipping room and makes errors in order filling very rare indeed.

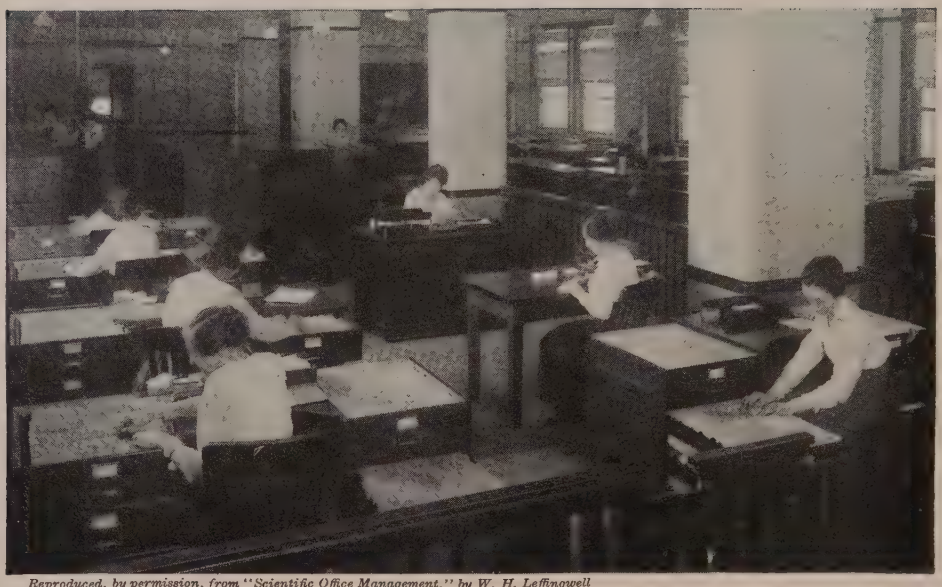


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FIGURE 139: Cabinet card files were found inconvenient in one office where thousands of cards had to be grouped at the young women's finger ends. These filing desks were designed to make work easier and they fill the bill nicely. Being easier, the work is done quicker, which translated into dollars-and-cents language means a "smaller payroll."

FIGURE 140: When a single order may contain a dozen or so items, some method of routing each part of the order to the proper department is essential. That's what is being done in this room, as fast as the incoming mail is opened. You may not face this problem now, but you soon may, and, of course, you'll want to know how to handle it.

transferred immediately to the entry division. The adding machine lists are retained, and at the end of the day a recapitulation is made of the lists belonging to each checker. The grand total should balance with her cash.

**This is the general routine**

It will be noted that an order passes through nine distinct operations in the mail-opening division:

1. Weighing
2. Separation of customers' mail from general mail
3. Sorting of customers' mail by states
4. Mechanical opening
5. Notation of remittance by mail-opener
6. Checking
7. Pinning
8. Listing
9. Adding device check of listing.

**Keeping a constant flow of work through the office**

For the entire process there is a maximum time allowance of one hour, which must not be exceeded. The division in the Chicago house is equipped to handle 35,000 orders a day. Each important step is checked and reviewed, so that the risk of undetected errors is reduced to a minimum. Speed is insured by the minute division of labor, each girl performing only one or two simple acts, and by the organization of the force in squads and units. Each unit consists of six mail-openers, two checkers, two pinners, and one lister. The office is arranged so that work passes directly from one desk to another without messenger service or mechanical conveyors. Orders come to each desk in an uninterrupted flow, and must be passed on at the same uniform rate, to avoid congestion. The first activity sets the pace for all the others.

Lets us consider a typical order. We will say it is from Henry J. Wagner, Forest City, Iowa, and calls for a varied assortment of merchandise. As several divisions will cooperate in filling it, it is called a multiple order. The explanation of the work of the entry division is based on the handling of this sample order.

**A specific example of how the system works**

In the first place, Henry Wagner's order comes from the mail-opening division with some 50 other Iowa orders. It is stamped with the time received. Then, still in its state group, it is turned over to a reader and route clerk, who normally handles only Iowa mail.

**The order reader's job**

The reader's first duty is to strip the order of all extraneous matter. There is none in this case. But often a customer will write a request for a catalog at the foot of the order form, or claim a shortage on a prior shipment, or ask for exchange of merchandise previously purchased. Anything of that kind is abstracted by the reader, and referred to the proper division for attention. Sometimes this extraneous matter is so entangled with the order itself that the whole case must be referred for settlement before the order can be filled.

The reader, who is an expert on routes, next shows by appropriate marks on the folder whether the order is to be forwarded by freight, express or parcel post. In this she complies with the customer's instructions, if any are given, and, if not, she follows her own judgment. In the case of Henry Wagner's typical order, the reader draws a ring around the letter F on the turned down margin of the folder, meaning that the order will be shipped by freight.

**Seeing that every detail in the letter is attended to**

How the order must be cut up later for distribution to the several merchandise divisions which will fill the items ordered is indicated next by red pencil lines across the price column. In this case the first item will be referred to the grocery division, the second to the ready-made clothing division, the third to the carpets and rugs division, and the fourth to the furniture division. There will be, in this particular instance, four sheets to the completed invoice, one for each division, and the reader so marks the folder.

Finally, she prescribes the route. To equip her for this part of her task, she is supplied with a card index of all the towns in her state, showing the parcel post zone in which each is located, the express companies maintaining agencies there, and the railroads serving it, with their Chicago connections. Henry Wagner's order, as you realize, is stamped R. I., meaning that it is routed to leave Chicago via the Rock Island Railroad. When the reader has finished her work, she drops the papers on a low-speed belt conveyor running past her desk, which carries them to a central sorting station. From this point segregation of orders by states is unnecessary, and it is abandoned.

**With a big mail this plan might be used**

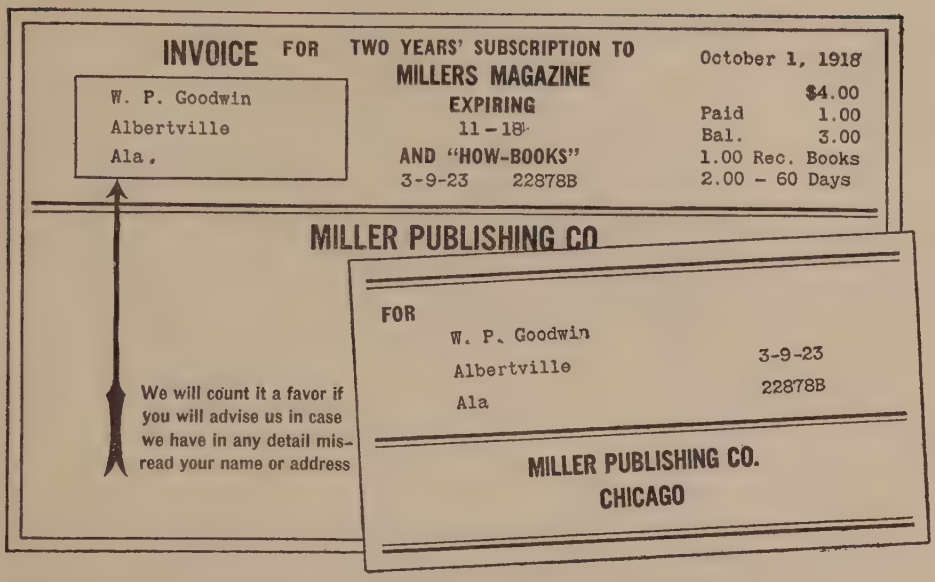



FIGURE 141: This invoice and the label which will go on the shipment are made on an addressing machine. Many diverse uses can be found for mechanical equipment of this sort. In one small office the addressing machine is kept busy day in and day out on circular letters, checks, payrolls, and half a dozen other duties that are very important.

October 1, 1918

W. P. Goodwin 11-18
Albertville 3-9-23
Ala. 22878B

$4.00
Paid 1.00
Bal. 3.00
1.00 Rec.Books
2.00 – 60 Days

ACCTG. 1
ACCTG. 2
STAT.
LIST
PLATE
COLL.

| DATE | PAID TO | CREDIT | BALANCE | DEBITS |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| BILL | |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| SA | |
| SB | |

FIGURE 142: This record is for the accounting department and shows the conditions of the customer's account at any time. It is made from the addressing machine plate that makes the invoice. It is declared that after this office began to use plates, a saving of over $3,500 a year started, which is quite a worth-while saving, you'll no doubt agree.

**Cutting up an order**

The order now goes to a clerk who indicates the time it shall be loaded into a freight car. This is not so difficult as it might seem, as she has notice of a certain house capacity, determined for the day from the weight of the first mail. She simply assigns the number of orders to each 10-minute period of operating time that this capacity will permit.

After this has been attended to, a stencil machine operator prepares a stencil showing the customer's name and address, the date, invoice number, amount of remittance, routing, and scheduled time of loading into the freight car. A checker verifies this stencil.

Following the stencil cutter and checker, an invoice clerk takes the order, and with a photographer's print trimmer chops it into strips along the red lines already drawn by the reader. These strips she pastes on invoice sheets, all the grocery items on one, furniture on another, men's clothing on a third, and so on. This is done so that each merchandise division will get only that part of the order which it fills.

**How changing the system kept customers satisfied**

It was formerly the practice to copy the different sections of a multiple order on the invoice forms, but that was materially slower than the present cutting and pasting method, and resulted in a certain percentage of errors of transcription. The customer himself occasionally made mistakes; ordered number seven shoes, for instance, when he meant number eight. Under the old system, when his new shoes pinched, he blamed Montgomery Ward & Company for sending him the wrong size. But when his own order comes back to him as an invoice, if there is any mistake of this character, he can see that he is himself at fault.

For quick identification at later stages, parcel post orders are pasted on pink sheets, express orders on yellow sheets, and freight orders on white sheets. The equipment of the invoice clerk includes, besides the print trimmer already mentioned, a trough for paste, a paperhanger's smoothing brush, and a shallow 10 by 12-inch zinc pan. She smears the bottom of this pan with paste, spreads her order strips in it face up, and immediately transfers them to the invoice sheets. The whole process of cutting and pasting is completed in a few seconds.

Here's that order again!

The order next passes to a girl operating a printing machine, who uses the stencil, cut as described in a preceding paragraph, to mark (1) the folder, (2) each invoice sheet, (3) a shipping label, (4) a bill of lading in duplicate, (5) in the case of freight a postal card notice of shipment, (6) an index memorandum for the advertising files, (7) an index card from which the permanent record of the sale is entered, (8) a supply of blank order forms which are sent to the customer with his merchandise, in anticipation of repeat orders.

At the same impression, by the simultaneous use of two additional stencils, the folder and invoice sheets are stamped with a schedule showing exactly when and where the different parts of the order must be sent for assembling, packing, and loading into the freight car.

The order, we will say, is to be assembled on Friday at 8:10, in basket number 16, freight section number 2. The different items must be there exactly at the time specified; for at 8:00 another order is being assembled in this basket and section, and at 8:20 still another; so that if this order did not arrive on schedule there would be no place for it.

How the order is made ready for shipment

The schedule is arranged to allow the merchandise divisions two hours to pick the orders and deliver them to the assembling sections. This allowance governs the schedule clerk. The stencil printing machine is fitted with stops which enable the operator to print the whole or any part of the lettering appearing on the three stencils. For instance, on the postal card notice of shipment only the customer's name and address are wanted. When this is to be printed the other marks are stopped out. Automatic feed devices are used which make it practically impossible for the operator to confuse the schedule by assigning the same time and basket to two orders.

The various papers delivered by the stencil printer are checked and separated for proper distribution. Folders and invoice sheets are turned over to the central pit.

The readers in the entry division work independently and on no fixed schedule, but the girls who subsequently take charge of the orders are organized in squads or units like those in the mail-opening division. A unit

**Checking the price**

comprises two stencil cutters, two stencil checkers, six clippers and pasters, three schedule printers, and two checkers. Each unit is required to pass 32 orders every 9 minutes. After 10 9-minute intervals, work is suspended for 10 minutes, to permit the girls to relax. Orders must pass entirely through the entry division in one hour and a half.

It is found that girls are not unduly taxed by the requirements of this schedule. In fact, the work becomes easier than it would be if handled at will. A clerk who cannot keep the pace is judged unfit for this particular class of work, and is transferred to other duties. As in the mail-opening division, the members of a unit are so stationed with reference to one another that papers may be passed from one operation to the next without messenger service.

In the central pit, which is merely a busy office, the invoice sheets are first sorted out by divisions, and then distributed to girls, who check the prices as quoted by the customer against the latest edition of the catalog, correcting any differences which they may discover. Finally, adding machine operators make a separate list or sales abstract of the orders for each division. For its three operations of sorting, pricing, and listing the central pit is allowed 45 minutes. Invoice sheets which it has passed are dispatched by pneumatic tube to the merchandise divisions.

**The time required for handling is short**

The entire clerical work connected with each order, with the single exception of the billing, which is necessarily deferred, has now been completed. There remain only the manual and mechanical processes of picking the various items from stock, assembling, packing, and shipping, with no paper work to delay the game at any point.

As the mail-opening division is allowed 1 hour, the entry division 1½ hours, and the central pit 45 minutes, it will be seen that an order passes through all of the preliminary stages within a maximum time limit of $3\frac{1}{4}$ hours. The development of a system capable of handling an almost unlimited volume of business at that uniform rate is certainly a creditable feat in office engineering. At any rate, it has worked out well here.

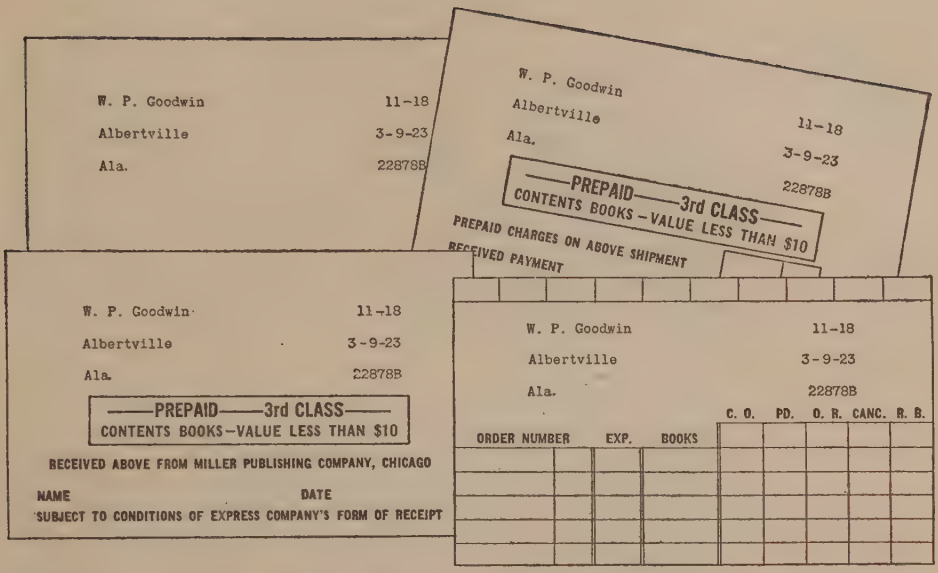



FIGURE 143: Here are four more forms that are printed on the addressing machine plate used to make out the forms shown on page 251. The routine that these forms fit is described in detail in this chapter. It's a simple way to handle orders and undoubtedly has points that may fit your needs, no matter what you sell or how you wish to sell it.

# ORDER REFUSED
## BY
## CREDIT DEPARTMENT

Date _____ Signed _____

| | |
|---|---|
| Accounting Department (1) | List Department |
| Accounting Department (2) | Plate Department — Kill Circularizing Plate Only |
| Statistical Department | Files |

Remarks:

FIGURE 144: Although we may not like to have the credit department turn down orders, for the health of the business it must be done now and then. This form helps the credit man to explain why the order was refused, and at the same time to issue the instruction that will kill the order. The standardized form means a saving in both time and money.

**A simple system that saved $3,500 a year**

In a smaller office it may not always be possible to handle work with the speed and efficiency Montgomery Ward & Company's system attains, but it often pays, regardless of the size of the concern involved, to overhaul the existing routine of order handling, and see if better results can be obtained. Also, the basic principles Montgomery Ward & Company have found effective can, of course, be applied in concerns of any size.

One man saves $3,500 annually by a new system in the order routine of his office. His concern handles small orders and subscriptions almost entirely, and deals with thousands of persons in the course of a year. Since all concerns handle some orders, and this man has learned to handle an order fast because in his business he happens to get a lot of separate orders daily, his ideas should prove helpful in rushing orders through in any concern.

Every order he receives goes through four main departments—order, list, bill, and addressing.

The first speeding-up improvement was the addition to all order blanks of keys which show the sorter at once how to classify them. This eliminates the necessity for reading, effecting a large economy of time.

**Where orders are complicated this method might be adopted with good results**

The order next is stapled to a numbered order form varying in initial at the top and in color according to the books and magazines ordered. The use of the different colored blanks, while a duplication of information, calls attention to the character of the order, which the initial might fail to do. On this sheet are brought down the main facts from the order. Amount of the order, amount paid, balance and terms are written in the reserved spaces. The book ordered is specified by initial, and the location of this mark shows how to ship.

Formerly, the expiration data was marked at this handling, but it is now put on the order form in the listing department, where it is on record accurately, rather than from the buyer's own statement which formerly had to be checked there, anyway. This reduced the marking work in the order department without increasing that of the listing department correspondingly.

When the information has been tabulated on the order form, this sheet and the attached order go to the listing department for reference to the customer's previous

record. If the list card shows a still open account, it passes to the credit department. Unfavorable points in his relations with the company—previous bad debts, falling behind on a contract still in force, or cancelations—hold up the order, and a letter is sent which asks for an adjustment. If a satisfactory reply is not received within a specified length of time, a sticker is gummed to the lower part of the order form with the notice "Order Refused." The order is then filed "dead." If the order is accepted for filling, however, it is returned to the order department and registered by the number on the form.

**Getting the credit department's approval**

The radical departure from the method hitherto in use comes next. Formerly, the order was billed by typewriter and carbon copies made. Insertion and removal of the carbon paper kept one employee busy—two, in the rush season. The billing sets, made in pads of 8 pieces, all for one order, took up a good deal of storage space. The biller destroyed excess pieces in the billing set—usually one or two. The cards in the set had to be cut to 3 by 5, for, while it was necessary to keep the paper sizes the same as that of the carbon in the billing process, it was equally necessary that the extra paper be removed before filing. The forms were then proofread and delivered to the various departments.

**Desk cabinets hold all the stationery**

Under the new system, as soon as the order department has registered it, the order form goes to the addressing machine and a plate is made. A girl puts a hand print on the form, and the proofreader checks it with the order. Next, the various forms necessary in the billing are run off, and each is distributed as it comes from the machine, to be delivered to the proper department. No storage space for stock is necessary except cabinets on the desks of the billers. Concerns of almost any kind which receive a number of orders of the same type can use this idea, of course.

All records receiving the plate impression have the name and address and the order itself upon them. Only the invoice and its copy are long enough, however, for the accounting record to register, as it would be superfluous elsewhere. If it is desired to use the customer as a prospect for other books, a follow-up card is run off at this time. The order form now is filed by number.

**This plan made billing unnecessary**

Instead of sending a slip to the plate department for the making, proofreading, and tabbing of the plate there, the complete plate is delivered.

Thus, in effect, this improvement has done away with the operation of billing, and has reduced the amount of paper and forms used in that process by substituting printing from addressing plates for typewriting and carbon copies.

The addressing plate finally bears, in addition to the name and address of the customer, his subscription expiration date, or the book order (in symbols), with its number, the date, and the accounting record, or both.

**New machines increased the output**

The plate serves a manifold purpose. Its impression is made not only upon the order form in the space reserved, but upon the invoice and copy, the shipping label, the express receipts, and the list card. Here is an idea that can be used in concerns of all sizes, certainly.

The invoice copy is practically a ledger sheet, with space for payments, billings, and the like, and, of course, goes to the accounting department. Only the label and receipts need to be sent to the shipping department, as the label has a full record of the order on it in symbols.

The new equipment consisting of three addressing machines with slides, tables, cabinets, and trays, was nearly paid for by the allowance on the four old billing machines. Instead of 1,200 bills per day, the maximum capacity of the four old billers, 1,500 are handled on two addressing machines. The workers are not so easily fatigued by the new machines, and the wages are lower, since the labor need not be so skilled.

**—and carbon paper is no longer used**

Carbon paper has been entirely eliminated. Consequently, the dull impressions which so often necessitated the remaking of sets are a thing of the past, as is the closely related failure to get a necessary print because carbon had not been inserted between sheets. No special sheet has to be used to make the plate impression, thus saving the paper and the attendant checking of the print. No label is used on the magazine wrappers, because they are printed, from plates, on a wrapper addresser. This does away with the label-pasting operation.

Invoices are now in regular typewriter style type, instead of the large size ordinarily used for billing. There

**How storage space for stationery was cut**

is no gum on the top of the cards, invoices, labels, and so forth. Where five pieces were formerly perforated for reduction in size, none are now. A saving of paper stock equal to $^2/_5$ of each of these pieces results.

On account of the smaller storage space required by each form, it is now possible to buy 50,000 to 150,000 forms at a time, instead of in lots of only 6,700, as formerly. Now none but the invoice is printed instead of every sheet in the set.

The shorter order routine, reaching the files more quickly, minimizes error and loss. Orders now do not leave the order, list, credit, and billing departments unless there is an addressed plate filed away. Wear and tear on general equipment is saved, while the addressing machines stand up better than did the billers under similar operations.

**How $3,605 was saved annually**

Reduced to dollars and cents, the saving has been in one year:

| | | |
|---|---|---|
| Stock and printing, 210 sets at $5.29 (69%).... | $1,110.90 | |
| Less cost of electros, compositions, and zincs... | 85.90 | $1,025.00 |
| Carbon paper at $45 per month average..... | | 540.00 |
| Labor: | | |
| Order department, 3 employees—$45 per month average (32%)..... | $1,620.00 | |
| Plate department, 1 employee—$35 per month (10%)..... | 420.00 | 2,040.00 |
| Total saving..... | | $3,605.00 |

And that is 6% on how much?—it may be interesting to figure it out for yourself.

## CHAPTER XVIII

# RECORDS THAT HELP ALONG PURCHASING

**Effective records are especially important for men who buy**

HOW much shall we buy? This is a question that every man who has anything to do with purchasing puzzles over more or less, and of late the problem has been unusually important owing to the conditions of demand and supply in most markets.

In a western concern the question is answered almost automatically by means of carefully kept records. No matter what the article under consideration may be, there is a card in the files that shows the buying and selling record of that particular article from the time the company started selling it.

The concern which uses these records happens to be in the wholesale business. But there is probably no reason why any concern which sells several kinds of articles regularly should not find similar records helpful.

One of the records is illustrated in Figure 145. This happens to be a card that is used in keeping track of blankets. It is specially ruled on both front and reverse to carry the information that is required. In the other departments different columns are provided on the cards as they are needed, to take care of the particular items of information that it may be necessary to record in connection with the articles which are bought and sold in those departments.

The card illustrated here gives the department head, for instance, exactly the information he needs for ordering, and also for regularly keeping in touch with the way the stock is moving. It carries a record of this particular style of blanket from the time the original order is placed until it is finally discarded from the lines carried.

**A simple card system**

On the back of the card, where the quantity on hand and on order is specified, information on this particular style of blanket and, in fact, all the lines, is filled in by

the stock clerk just prior to the time when it may be thought advisable to place a new order. Thus it affords a permanent quantity record.

**How the system works in actual practice**

"One man, with a stenographer to write the letters, does all the purchasing in many concerns," says the buyer in an eastern concern. "The system described here was developed to meet just such conditions. It covers practically every detail of handling this work in the ordinary smaller plant, and with us has proved very effective.

"In the first place, we find it important to list each article regularly purchased for the concern with the latest price and the usual source of supply. It has been our experience that the most convenient way to carry this information is on 3 by 5 cards. We check every invoice, especially as to price, against this card. In this way we keep it correct and up to date. This system also is readily kept in order by low-priced girls.

"Our catalogs are cross-indexed in a 3 by 5 card file, white cards being used for names, and buff for articles. Catalogs of convenient size and thickness we file in numerical order in the vertical position of books, while jobbers' catalogs of large size are placed on a desk or table. These need not be indexed, as they are readily identified by appearance. In fact, we regularly use not more than a dozen of them.

**Catalog files should be kept in good order**

"Experience has shown us that the small circulars which do not stand up like bound books, and are, therefore, not well adapted to filing with the book catalog, may best be kept on edge in a drawer of ordinary depth. They are lettered consecutively to distinguish them immediately from the regular book catalog file. These we also cross-index.

"In addition to these catalog files, there is a special drawer for filing circulars descriptive of articles that are not sufficiently interesting to place in the regular catalog file, and to be cross-indexed. These circulars we place in vertical file folders by subjects. When something quite out of the ordinary has to be bought, as frequently happens, this file often produces valuable descriptive matter, and saves us much time in looking up sources of information.

**Making sure that all purchases are received**

"We have a hard and fast rule that no catalogs or circulars may be taken from the room in which they are kept. One clerk files and has entire charge of the catalog library, making this rule easy to enforce.

"When the purchasing agent sends out an order for material requisitioned by the stock room, a carbon of the order is made on the reverse side of the requisition. This carbon we file in a special vertical file. Concerns from which we order frequently have special folders, while carbons of orders to others are filed alphabetically. Reference to this file indicates at once all unfilled orders outstanding. After we have received and checked an invoice, we send the requisition form with the carbon of the order on the reverse side to the receiving department as a notice that such goods are on the way, and indicate to which department they are to go on arrival. The invoice is then placed on the vertical file from which the requisition form has been removed.

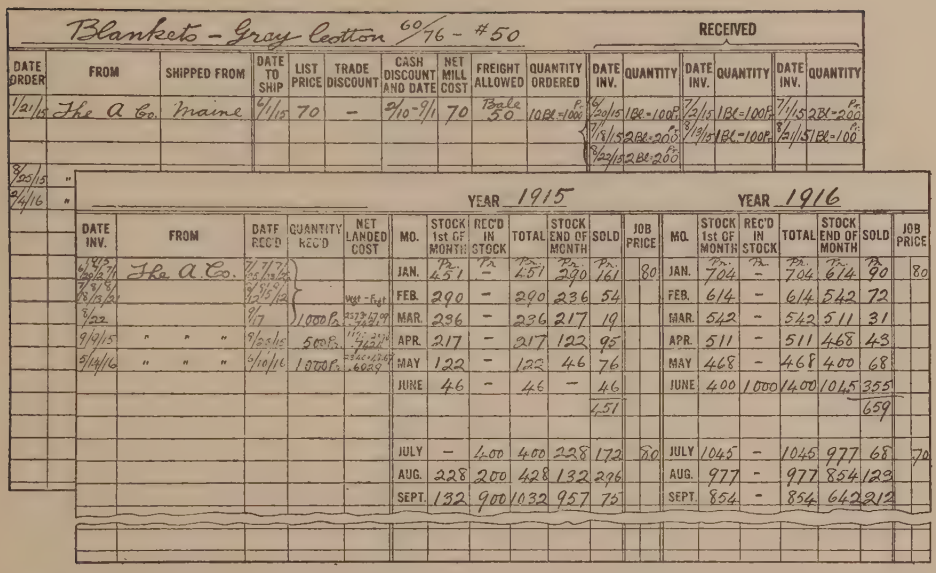
"One clerk has charge of all goods received, and everything passes through his hands. This definitely places the responsibility, and prevents disputes that might arise if goods were permitted to be left in several different places around the plant.

"As soon as the material arrives, the receiving clerk issues a 'material received' sheet in duplicate. One he sends to the purchasing department with the requisition sheet, and the other he retains in his own department for his permanent record.

**A tested chronological filing system for invoices**

"When the invoice has been checked up, the receiving slip is filed by date received in a special box file. From time to time it is necessary to refer to such receipt slips, and chronological filing affords us the easiest reference. Every six months the slips are removed and filed away permanently. We also file the original requisition, but by number. We keep these near at hand for six months also, as we find them convenient for occasional reference.

"All invoices, after they are audited by the purchasing department, and payment is authorized by the accounting department, are returned to the purchasing agent's office for permanent filing. Many concerns file invoices in the general correspondence files, perhaps in the special file room; but we feel that here is the logical place for



Blankets – Gray Cotton 60/76 – #50

| DATE ORDER | FROM | SHIPPED FROM | DATE TO SHIP | LIST PRICE | TRADE DISCOUNT | CASH DISCOUNT AND DATE | NET MILL COST | FREIGHT ALLOWED | QUANTITY ORDERED |
|---|---|---|---|---|---|---|---|---|---|
| 1/21/15 | The A Co. | Maine | 4/1/15 | 70 | – | 9/10-9/1 | 70 | Basis 30 | 100 Bl-100 lbs |
| 3/20/15 | " | | | | | | | | |
| 9/4/16 | " | | | | | | | | |

RECEIVED

| DATE INV. | QUANTITY | DATE INV. | QUANTITY | DATE INV. | QUANTITY |
|---|---|---|---|---|---|
| 4/20/15 | 1 Bl-100 lbs | 7/2/15 | 1 Bl-100 lbs | 7/15/15 | 2 Bl-200 lbs |
| 7/31/15 | 2 Bl-200 lbs | 9/9/15 | 1 Bl-100 lbs | 9/21/15 | 1 Bl-100 lbs |
| 9/23/16 | 2 Bl-200 lbs | | | | |

YEAR 1915

| DATE INV. | FROM | DATE RECD | QUANTITY RECD | NET LANDED COST | MO. | STOCK 1st OF MONTH | REC'D IN STOCK | TOTAL | STOCK END OF MONTH | SOLD | JOB PRICE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/15/15 4/20/15 7/15/15 | The A Co. | 1/15/15 | | | JAN. | 451 | – | 451 | 290 | 161 | 80 |
| 7/31/15 8/19/15 | | 8/19/15 | | | FEB. | 290 | – | 290 | 236 | 54 | |
| 8/22 | | 9/7 | 1000 lbs | Wgt – Est 2537.47 .7247 | MAR. | 236 | – | 236 | 217 | 19 | |
| 9/9/15 | " " " | 9/25/15 | 500 lbs | Wgt 1271 .7247 | APR. | 217 | – | 217 | 122 | 95 | |
| 9/9/16 | " " " | 9/10/16 | 1000 lbs | Wgt 2524 .6029 | MAY | 122 | – | 122 | 46 | 76 | |
| | | | | | JUNE | 46 | – | 46 | – | 46 | |
| | | | | | | | | | | 451 | |
| | | | | | JULY | – | 400 | 400 | 228 | 172 | 50 |
| | | | | | AUG. | 228 | 200 | 428 | 132 | 296 | |
| | | | | | SEPT. | 132 | 900 | 1032 | 957 | 75 | |

YEAR 1916

| MO. | STOCK 1st OF MONTH | REC'D IN STOCK | TOTAL | STOCK END OF MONTH | SOLD | JOB PRICE |
|---|---|---|---|---|---|---|
| JAN. | 704 | – | 704 | 614 | 90 | 80 |
| FEB. | 614 | – | 614 | 542 | 72 | |
| MAR. | 542 | – | 542 | 511 | 31 | |
| APR. | 511 | – | 511 | 468 | 43 | |
| MAY | 468 | – | 468 | 400 | 68 | |
| JUNE | 400 | 1000 | 1400 | 1045 | 355 | |
| | | | | | 659 | |
| JULY | 1045 | – | 1045 | 977 | 68 | 70 |
| AUG. | 977 | – | 977 | 854 | 123 | |
| SEPT. | 854 | – | 854 | 642 | 212 | |

FIGURE 145: The price card and stock record are essential records for most well-managed purchasing offices. The two shown above are on opposite sides of the same card and do very nicely for one purchasing agent as they show at a glance the average stock the year round and what each order has cost. They substitute knowing for guessing.

**CONDITIONS**

1. Please acknowledge receipt of this order and specify a definite time when it will be shipped.
2. The right is reserved to cancel this order if it is not filled within a reasonable time.
3. This order must not be filled at higher prices than last quoted or charged without advice and authority.
4. Obtain lowest possible freight rate and name in bill of lading.
5. Mail invoice at the time of shipping.
6. No charge allowed for packing.
7. In accepting this order the seller guarantees protection against patent litigation on material specified herein.

JOHNSTON MOTOR CO. Pittsburg, Pa. _____ 191__

To _____

Gentlemen: – Please enter our order and ship via _____ for our account, the following goods as described below, subject to conditions printed hereon.

N. B. – Invoices, correspondence and packing slips, referring to this order must state order number and part symbol.

| Quantity | Symbol | Material and Specifications | Price and Terms |
|---|---|---|---|
| | | | |

**PURCHASE ORDER**

No. _____
Req. No. _____
Chg. Acct. _____
Mfgr's. No. _____
Acknowledged _____

Johnston Motor Co.

**REQUISITION ON PURCHASE DEPARTMENT**

No. _____
Date _____

Please purchase for _____ the following material:–

To be shipped directly to _____ Via _____

Wanted partially by _____ Completely by _____ Rush _____

| Quantity | Description | Model | Symbol |
|---|---|---|---|
| | | | |

Checked Signed Approved

| Estimates Solicited | | | | | Orders Placed | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Date | Quantity | Firm | Date | Quotation | Date | Quantity | Firm | Order No. | Price |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Accepted _____

Johnston Motor Co.,

per _____

FIGURE 146: When the buyer receives a properly authorized requisition from the production department, he consults his records to find the best "buy." The back form is used in placing orders. Three carbons are made, but the "price and terms" data appear only on the original. This plan is described and explained more fully on page 264.

**A system that relieves the purchasing agent of a mass of routine**

these documents, since this department has to refer to them more often than any other."

Every purchasing department has two principal functions—buying and getting delivery of materials. The records of an efficient department quickly supplies any information bearing on either of these functions, and the routine of purchasing is arranged so that from the time material is requisitioned until it is delivered there is a minimum of delay.

Only when the hundreds of details to be watched in connection with prices, sources of supply, delivery dates, catalogs, and quotations have been organized into a carefully planned system of record, can the buyer successfully pursue strategy in placing purchases which will bear fruit in worth-while economies. In buying for even a small business, these details are numerous. But in a large concern, where the purchasing office must oversee the placing of orders for everything, from pins for the manager's desk to quantities of raw material for the production departments, the number of items to be kept track of is enormous.

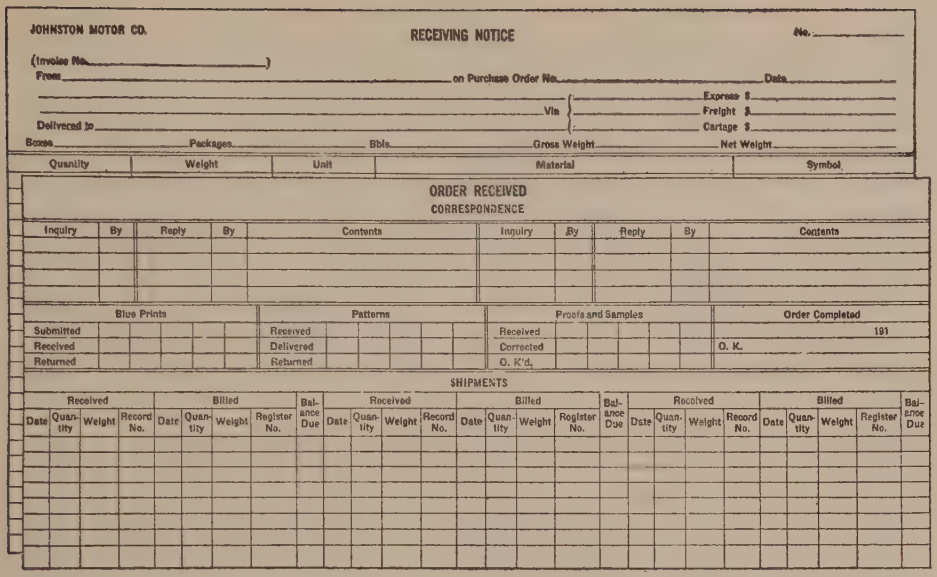
The system used by a western manufacturing concern takes care of these details thoroughly, and with a minimum of clerical labor. Quick disposition of every matter, with means for instant reference are the points that this system secures. The purchasing agent keeps his desk free of the large current influx of detail by dispatching everything quickly and methodically. There is one place for every record, one method of doing every task.

**How requisitions are handled**

Requisitions from other departments give the purchasing agent his instructions as to what material is to be bought, and each requisition starts the machinery of his office working to find the one best "buy." These requisitions (Figure 146, shown on page 263) are honored only when signed by the person in each department who has authority to direct purchases.

This form incorporates on one sheet all detail and information requiring record. It performs the triple function of a complete purchase requisition, an inquiry and quotation record, and an order and price record.

When a requisition comes to his office, the buyer immediately notes in the "estimates solicited" column the



JOHNSTON MOTOR CO. — RECEIVING NOTICE — No.

(Invoice No. )

From — on Purchase Order No. — Date

Delivered to — Via — Express $ — Freight $ — Cartage $

Boxes — Packages — Bbls. — Gross Weight — Net Weight

| Quantity | Weight | Unit | Material | Symbol |
|---|---|---|---|---|
| | | | | |

ORDER RECEIVED

CORRESPONDENCE

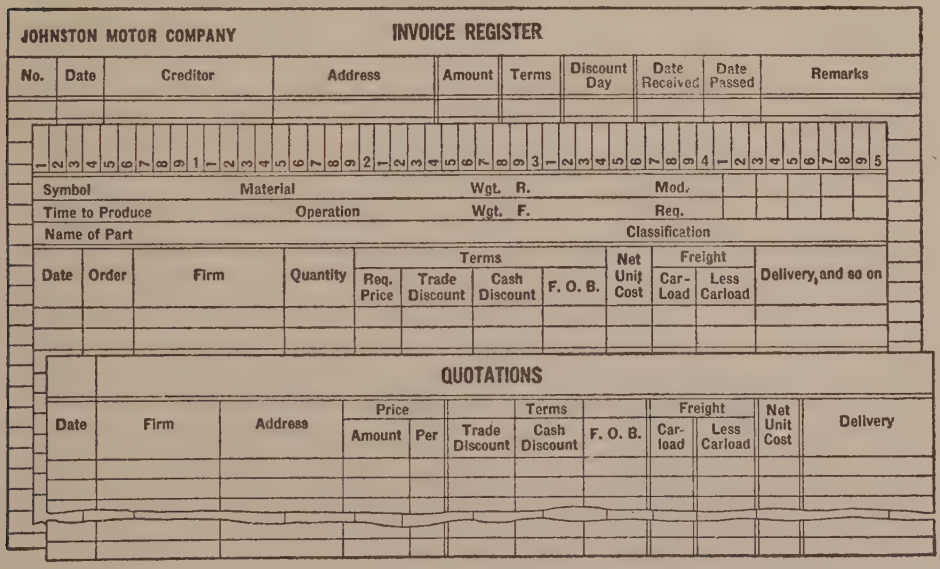
| Inquiry | By | Reply | By | Contents | Inquiry | By | Reply | By | Contents |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Blue Prints | | Patterns | | Proofs and Samples | | Order Completed |
|---|---|---|---|---|---|---|
| Submitted | | Received | | Received | | 191 |
| Received | | Delivered | | Corrected | | O. K. |
| Returned | | Returned | | O. K'd. | | |

SHIPMENTS

| Received | | | | Billed | | | | Balance Due | Received | | | | Billed | | | | Balance Due | Received | | | | Billed | | | | Balance Due |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Quantity | Weight | Record No. | Date | Quantity | Weight | Register No. | | Date | Quantity | Weight | Record No. | Date | Quantity | Weight | Register No. | | Date | Quantity | Weight | Record No. | Date | Quantity | Weight | Register No. | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

FIGURES 147 and 148: The order record gives a complete history of every transaction. Having all of the information grouped in one place is a time and labor saver for the purchasing agent. The receiving notice records information concerning material received and serves as an accurate guide to the purchasing office in approving invoices for payment.



JOHNSTON MOTOR COMPANY — INVOICE REGISTER

| No. | Date | Creditor | Address | Amount | Terms | Discount Day | Date Received | Date Passed | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

1 2 3 4 5 6 7 8 9 1 2 3 4 5 6 7 8 9 2 1 2 3 4 5 6 7 8 9 3 1 2 3 4 5 6 7 8 9 4 1 2 3 4 5 6 7 8 9 5

Symbol — Material — Wgt. R. — Mod.

Time to Produce — Operation — Wgt. F. — Req.

Name of Part — Classification

| Date | Order | Firm | Quantity | Terms | | | | Net Unit Cost | Freight | | Delivery, and so on |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Req. Price | Trade Discount | Cash Discount | F. O. B. | | Car-Load | Less Carload | |
| | | | | | | | | | | | |

QUOTATIONS

| Date | Firm | Address | Price | | Terms | | | Freight | | Net Unit Cost | Delivery |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Amount | Per | Trade Discount | Cash Discount | F. O. B. | Car-load | Less Carload | | |
| | | | | | | | | | | | |

FIGURES 149, 150, 151: The invoice register is kept in the buying department, and shows the amount and paying date for every bill received. The middle card gives practically a perpetual inventory on each class of material, and the "quotations" card kept for each article shows where the best "buy" can be secured. These forms can help in any office.

**Checking up on bids received**

names of concerns which he considers satisfactory sources of supply for the material wanted. He dictates a letter to be sent to each of them, or simply hands the requisition to the stenographer, with the names of the concerns selected, and she sends a form letter to each concern requesting a quotation and statement of possible delivery dates.

Copies of these letters are immediately filed in the general files, since the requisition contains all necessary information. The requisition itself is filed numerically in the buyer's desk, pending answers to the letters. Each letter mentions the requisition number and directs that replies make reference to it. As the replies arrive it is then a simple matter to find the proper requisition and note on it the quotations and delivery dates promised. After the proposals are received and noted, the buyer selects the one which, everything considered, is most favorable. Under the "orders placed" column the name of this firm is entered together with the quantity to be purchased and the price.

**This purchase order carries all the information needed**

All purchase orders bear the requisition number, so that there is a ready cross-reference between requisitions and orders. The requisition is permanently filed under its serial number. The original copy of the purchase order, as sent to the supplier, is shown in Figure 146, on page 263. The arrangement of this copy is convenient, because it classifies in groups purchases which are similar in character. It is particularly desirable to keep all price and terms data separate from the rest of the composition. By having it in the position shown, such information, which it is sometimes desirable to withhold from departments and individuals outside of the purchasing department, is excluded from copies issued to other departments by the simple expedient of having such copies shortened so as not to receive the carbon impression. One copy of this purchase order is immediately and permanently filed under its serial number. Another copy is filed under the firm name.

**Centralizing information often saves time**

The reverse of the copy of the purchase order (Figure 147, on page 265) is retained in the purchasing department. If the information concerning the order is carefully recorded, on this form, it is a desk cleaner, a posi-

tive check on all activities in connection with each purchase, and a chronicle of all facts in compact form.

**Keeping accurate track of shipments**

The record of shipments is one of the most valuable features of this form. Details regarding shipments are posted as soon as they appear, so that the record is kept constantly up to date. All invoices, also, are recorded as soon as they are received, and are then checked with receipts of goods. The same is true of receipts, when the material arrives before the invoice. The card thus affords ready information about the condition of shipments, total received to date, amount on the way, and particularly it permits quick attention to discrepancies which come up in checking invoices with receipts.

Invoices recorded, but not checked with receipts, are carefully placed in alphabetical order in the buyer's file, pending the receipt of the material itself. When such deliveries are finally made, the correct invoice is speedily found by referring to invoices posted on the purchase order. There the register number of the invoice identifying the receipt is given.

In some cases material purchased is ordered shipped to an address other than the purchaser's. These shipments are recorded in the same manner as those made to the purchaser direct. The invoices are received at the main office, but in order to keep informed of receipts of material at the branch houses, a special report form is provided, made out in triplicate and serially numbered. The first and second copies are sent to the consignee, and the third copy is retained by the buyer.

**Knowing when material is received**

A glance at the form shows that the purchaser has received notice, by invoice, from the supply house, and it reports in full the contents of the invoice. The consignee, immediately upon receipt of the shipment reported, notes his actual receipts on the duplicate copy sent him, and returns this duplicate to the purchaser. The purchasing department then destroys the triplicate copy and records the report in Figure 147, thus keeping a close tab on indirect shipments.

Completely filled out for each purchase, Figure 147 is filed away carefully. Frequent reference is made to these records when occasion again arises to purchase the same material.

**Cooperating with the accounting department**

The checking of invoices and receipts in many concerns is performed in the accounting department. This is often unwise, because the purchasing department, having made the purchase, and carried on all correspondence in connection with it, is in the best position to identify receipts of material with invoices. Furthermore, the purchasing department needs some record, and by doing the work itself avoids duplication of tasks. When the invoice leaves the purchasing department, it is entirely checked for price, terms, material, quantity, and extensions, and is approved for payment. Nothing remains for the accounting department to do but audit and pay the bill. This puts all work where it belongs.

**Keeping track of invoices to save the discounts**

When goods are actually being received, it is essential that the receiving report gives all information in connection with the shipment, including the purchase order number. This is also done conveniently by Figure 148, shown on page 265. If there is no purchase number covering the receipt of any shipment, it is simply not accepted. This rule has compelled supply houses to indicate on packing slips, or on the outside of the container, the purchase order number on which the shipment is made.

Invoices come direct to the purchasing departments from the mail-opening room. Figure 149, shown on page 265, illustrates the type of invoice register in use. Each invoice, as soon as it is received, is recorded and given a register number. By this means it is possible to keep track of the invoice so as to lose no discounts. By recording the amounts of the invoices, the purchasing department knows at all times just how much money its purchases amount to for the week, month, or year.

**Another effective system for purchasing**

The record card used to keep track of material is shown in Figure 150, on page 265. Since much of the business of this concern consists of goods manufactured and sold from stock, large quantities of the same kinds of material have to be bought repeatedly. The card is self-explanatory, except for the series of figures at the top. This arrangement is designed for use with sliding metal clips. Fastened over any of the figures, a clip indicates that enough material has been purchased to produce that many units of the article in multiples of 10, 100, or 1,000.

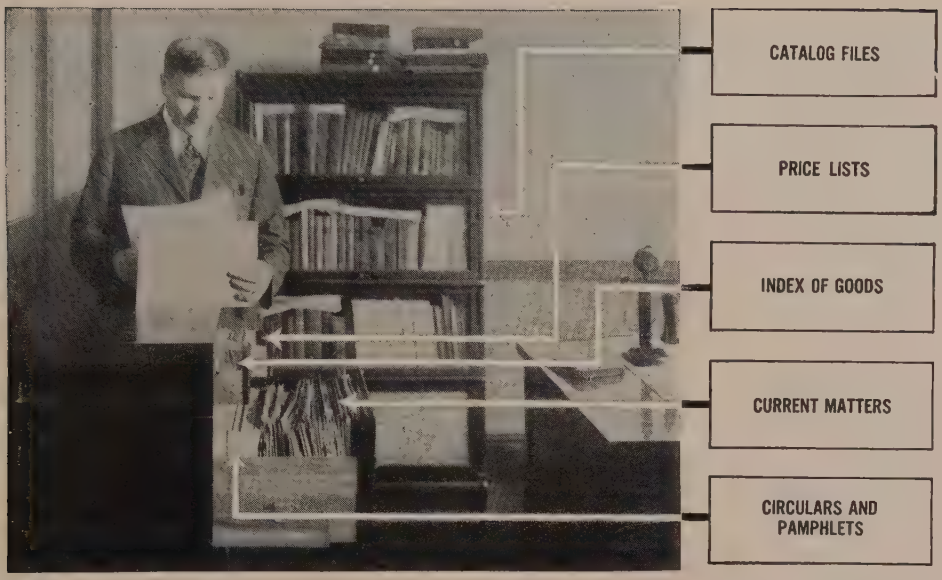



FIGURE 152: The arrangement of the buyer's office to get quick action and the best buys is an important feature. The one shown here has been found effective by one purchasing agent as it keeps his price data and catalogs within easy reach of his chair. A sectional book case and a vertical file help to solve the problem for him so it stays solved.

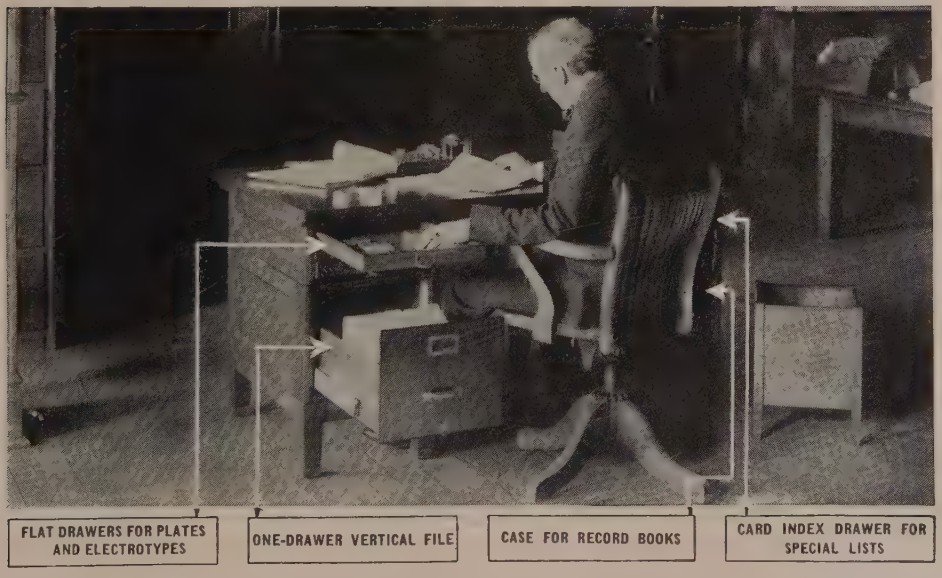

FLAT DRAWERS FOR PLATES AND ELECTROTYPES
ONE-DRAWER VERTICAL FILE
CASE FOR RECORD BOOKS
CARD INDEX DRAWER FOR SPECIAL LISTS

FIGURE 153: There is a suggestion for any purchasing agent in the desk arrangement used by this buyer of printing. He needs practically no furniture aside from his desk, which is arranged to keep all of the data needed in the most accessible way. Special desks like this can be found which will meet practically any special needs which exist.

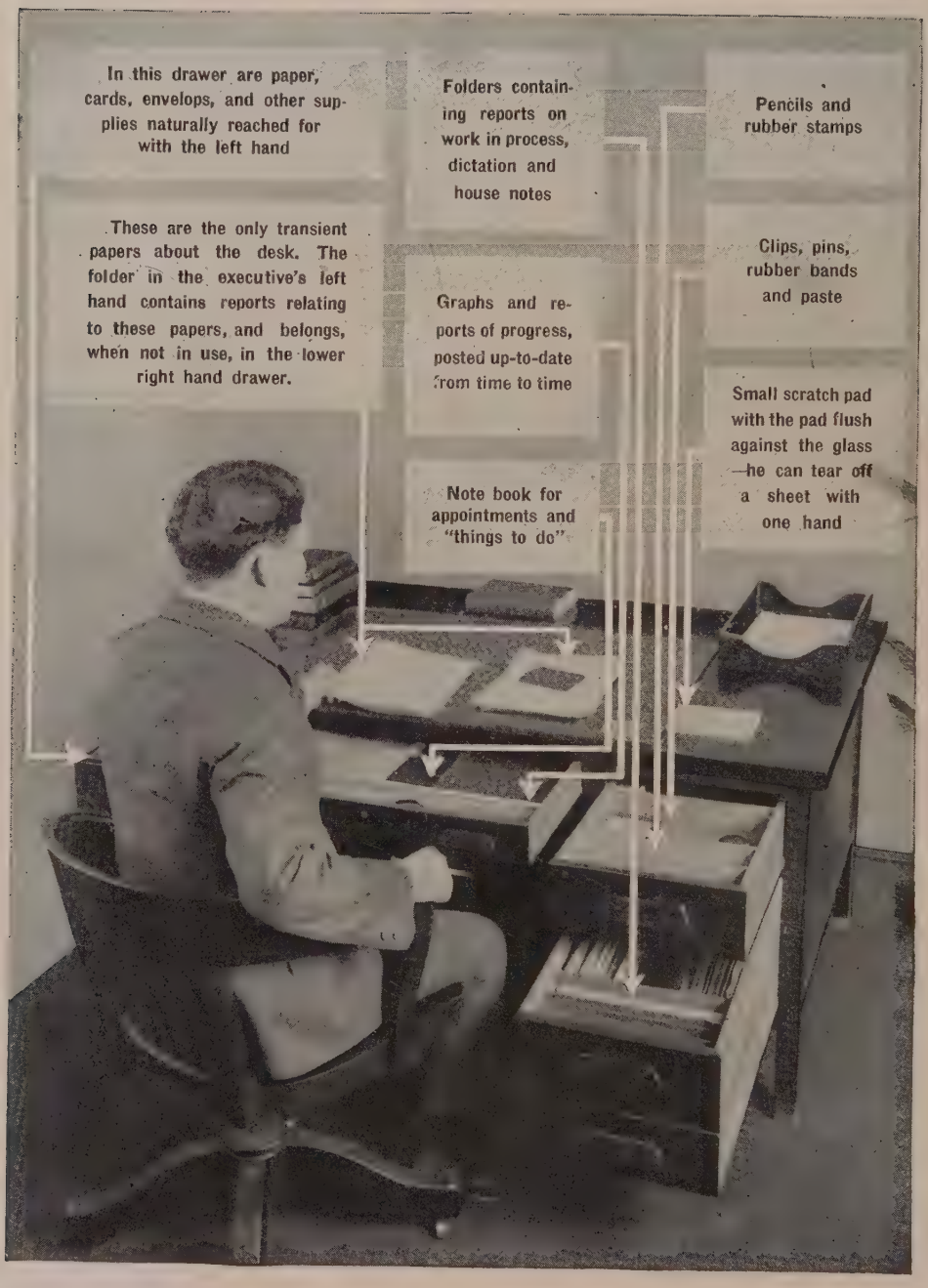

In this drawer are paper, cards, envelops, and other supplies naturally reached for with the left hand
Folders containing reports on work in process, dictation and house notes
Pencils and rubber stamps
These are the only transient papers about the desk. The folder in the executive's left hand contains reports relating to these papers, and belongs, when not in use, in the lower right hand drawer.
Graphs and reports of progress, posted up-to-date from time to time
Clips, pins, rubber bands and paste
Small scratch pad with the pad flush against the glass —he can tear off a sheet with one hand
Note book for appointments and "things to do"

FIGURE 154: We all agree that well-ordered desks are vital requisites in any office, whether the desks are those of clerks or high-priced executives. Above is the effective desk plan of one busy man. Note how his working tools are arranged to be brought to hand for effective work at an instant's notice. Perhaps this plan will give you a valuable desk hint.

Handling emergency orders in double quick time

Frequently certain goods are wanted in a hurry, and there is no time to write for quotations. On all such goods a record of quotations (Figure 151, shown on page 265) is maintained. With this card carefully kept up to date, one for each kind of material, it is possible to buy satisfactorily with little delay.

A catalog file with an adequate index is also kept. To avoid the difficulty of reference, frequently experienced with a large catalog file, the index is made extremely thorough. A 3 by 5-inch card is used, and every catalog is indexed twice: first by name of the article sold, and next by name of the maker. It is thus possible to locate quickly all the manufacturers of any article, or to find from the file what kind of material any manufacturer can supply.

While the material purchased will, of course, vary in different lines of business, it has been found that purchasing records and routine which prove satisfactory for one office may be equally as good for another. There is a certain order that must be gone through whether the goods to be bought are toothpicks or locomotives.

1. The material is requisitioned
2. Bids are requested
3. The order is sent
4. Notation of the receipt of material is made
5. Invoice is approved and paid.

How one purchasing agent analyzed the record problem

A factory purchasing agent was once employed to do the buying for a construction company on a contract where time was an important factor. He soon saw that the existing routine and records were too cumbersome and complex. In spite of the voluminous records, there were certain cases where memory was the only key to the information required. To rectify this condition, he first asked himself what these records were for. He decided that they should be able to tell:

1. The foreman or engineer—When the material should be received, and if already received, on what date
2. The traffic man—When the material was shipped, and the routing
3. The purchasing agent—Where bought, and at what price

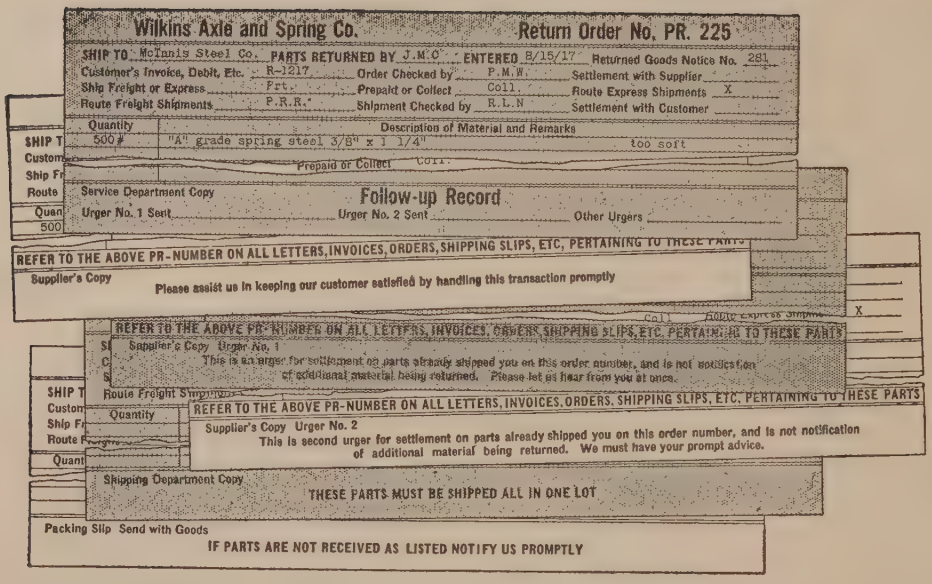

Wilkins Axle and Spring Co.
Return Order No. PR. 225
SHIP TO McInnis Steel Co. PARTS RETURNED BY J.M.C. ENTERED 8/15/17 Returned Goods Notice No. 281
Customer's Invoice, Debit, Etc. R-1217 Order Checked by P.M.W. Settlement with Supplier
Ship Freight or Express Frt. Prepaid or Collect Coll. Route Express Shipments X
Route Freight Shipments P.R.R. Shipment Checked by R.L.N Settlement with Customer
Quantity Description of Material and Remarks
500# "A" grade spring steel 3/8" x 1 1/4" too soft
Prepaid or Collect Coll.
Service Department Copy
Follow-up Record
Urger No. 1 Sent Urger No. 2 Sent Other Urgers
REFER TO THE ABOVE PR-NUMBER ON ALL LETTERS, INVOICES, ORDERS, SHIPPING SLIPS, ETC, PERTAINING TO THESE PARTS
Supplier's Copy
Please assist us in keeping our customer satisfied by handling this transaction promptly
REFER TO THE ABOVE PR-NUMBER ON ALL LETTERS, INVOICES, ORDERS, SHIPPING SLIPS, ETC. PERTAINING TO THESE PARTS
Supplier's Copy Urger No. 1
This is an urger for settlement on parts already shipped you on this order number, and is not notification of additional material being returned. Please let us hear from you at once.
REFER TO THE ABOVE PR-NUMBER ON ALL LETTERS, INVOICES, ORDERS, SHIPPING SLIPS, ETC. PERTAINING TO THESE PARTS
Quantity
Supplier's Copy Urger No. 2
This is second urger for settlement on parts already shipped you on this order number, and is not notification of additional material being returned. We must have your prompt advice.
Shipping Department Copy
THESE PARTS MUST BE SHIPPED ALL IN ONE LOT
Packing Slip Send with Goods
IF PARTS ARE NOT RECEIVED AS LISTED NOTIFY US PROMPTLY

FIGURE 155: These six copies of the purchase order are made with carbon paper in a single operation. Individual requirements differ, but the different departments of a business may need from five to nine copies, in order to keep the records straight and to provide for the proper follow-up, receipt, and payment for the goods at exactly the right time.

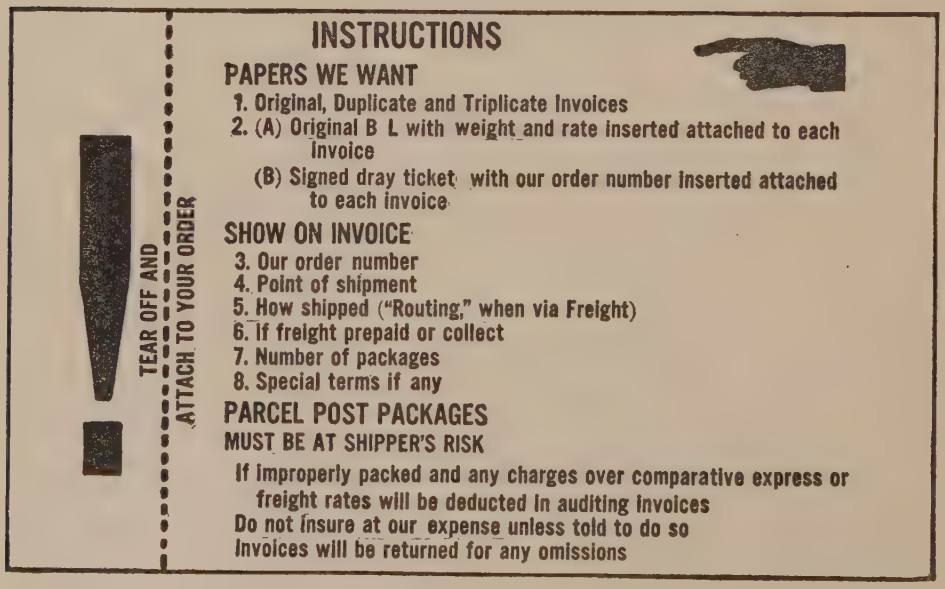

INSTRUCTIONS
PAPERS WE WANT
1. Original, Duplicate and Triplicate Invoices
2. (A) Original B L with weight and rate inserted attached to each invoice
(B) Signed dray ticket with our order number inserted attached to each invoice
SHOW ON INVOICE
3. Our order number
4. Point of shipment
5. How shipped ("Routing," when via Freight)
6. If freight prepaid or collect
7. Number of packages
8. Special terms if any
PARCEL POST PACKAGES
MUST BE AT SHIPPER'S RISK
If improperly packed and any charges over comparative express or freight rates will be deducted in auditing invoices
Do not insure at our expense unless told to do so
Invoices will be returned for any omissions
TEAR OFF AND ATTACH TO YOUR ORDER

FIGURE 156: When many shipments are received daily it's hard to keep records straight unless certain information accompanies the shipments and invoices. To get this information, one purchasing agent attaches this sticker, printed in red, to his purchasing order. He finds that it flags attention and gets his instructions followed.

4. The invoice clerk—The number of the order on which any invoice applied

5. The receiving clerk—On which order any material applied

6. The teamster—Where to deliver the material.

**With a card for each item purchased**

On analyzing these requirements, the purchasing agent found that no matter what information was wanted, or who wanted it, there was one fact that was always known —the nature of the material; and one record that would give all the other details—the order itself.

So the description of the material was the starting point, and, based on this, a card file was made up. Each card was 5 by 7 inches, and one or more cards were used for each kind and size or type of material. This is much like the one shown in Figure 155 on page 272. As soon as an order was placed, all columns were filled in and the card filed alphabetically. After getting the receipt and invoice for the material, the dates of these were entered in the proper columns.

This card is used in a number of different ways. Suppose a requisition calls for $\frac{3}{8}$ by 5 machine bolts. The card gives the name of every merchant from whom they have previously been secured, with the price and the time required for delivery. Knowing how soon this order must be delivered, the purchasing agent can tell from his card where to place the order to best advantage, considering both price and delivery.

**—the system works out successfully**

If a construction superintendent telephones in that his crushed stone "ordered a month ago is not on the job, and 25 men are idle, at $2.50 a day," the purchasing agent turns to his card file. The card may show only one undelivered order for stone, requisition for which was received four days before, and the order placed on the following day. Of course this settles the question, so far as the complaint is concerned.

Invoices frequently fail to bear the number of the order on which they apply, and this causes great delay and congestion in a department where there may be from 500 to 1,000 unfilled orders on file. Suppose an invoice for ½-inch rope comes in from Franklin & Company. Reference to the card shows only one order for this size of rope placed with that firm, which has not

**How requests for bids are sent**

been paid, and gives the order number. A bit of time saving as against thumbing over, perhaps, 1,000 orders.

Three and a half years of use have failed to show a condition where this file is not all that is necessary, or an instance where memory had to be called to the rescue.

In asking for bids, an inquiry form is used, printed on onion skin paper, which is so thin that 8 or 10 copies may be typewritten simultaneously. The form shows the date on which bids must be in, whether they are to be made by letter or telegram, and the f. o. b. point on which they are to be based. A promise of delivery must be made on each item, and this is considered, with the price, in letting the order. Little trouble is experienced from bidders not complying with these conditions, after they once find out that incomplete bids are not considered.

**Making sure that everything needed is ordered**

At first a requisition would occasionally go astray between its originator and the purchasing department, sometimes causing serious delay. To obviate this, a copy of the order is sent to the author of the requisition, who checks it and notes the order number on the requisition. If he does not get this order within two or three days, he is expected to notify the purchasing department. If the requisition has not been received, a duplicate is made at once. Failure to notify the purchasing department, of course, relieves it of responsibility.

Sometimes a purchasing department has to return invoices to the senders for order numbers and other information which it is essential to know.

One purchasing agent inaugurated a plan which has been successful. Stickers, as shown in Figure 156 on page 272, are sent out to supply houses. The narrow left margin of this sticker is glued to the requisition or order blank, with instructions to the shipper to tear off the right-hand portion and attach it to the order.

**Putting deliveries up to the purchasing department**

The purchasing department is also usually responsible for seeing that the materials bought are delivered. Records and routine for doing this must be complete and simple—one office has a vivid graphical method of showing the location of material in transit which is simple in operation and does away with the necessity of searching through masses of correspondence. A map of the United States approximately 10 by 15 feet in size, mounted on

soft pine, is hung on the wall in the traffic manager's office. As soon as a car of material is started to this concern, the car number is placed on a large tack with a celluloid head, and the tack is stuck in the map at the shipping point. In the lower left-hand corner of the map is a frame in which is posted with removable letters the car number and contents. As the car proceeds toward its destination the position of the tack is changed on the map to correspond.

**A map that helps in handling traffic**

This means that the railroads must keep the consignee constantly posted on the arrival of cars at division and transfer points. Arrangements of this sort are usually easily made.

A very simple and effective method of keeping shipment records has also been evolved in this office.

**Keeping track of deliveries**

Several of the common systems of card files were tried and discarded, as well as the plan of keeping an abstract of all correspondence on the reverse side of the order. All of these were objected to, chiefly because of the difficulty of getting all of the delivery and transportation information that was required on the order or card, the necessary abbreviation often resulting in errors or omissions.

In this system, the clerical work connected with transcribing the correspondence to the orders, also, was great, and the consequent need of using cheap clerks resulted in many errors that caused much trouble and necessitated many references to the file, after all. The plan ultimately adopted did away with all clerical aid, and reduced the traffic manager's department to himself and a single stenographer, who also takes care of the files.

**This traffic man's records are effective**

Now, when a purchase order is typed, a carbon copy of the order is sent to the traffic department, where it is filed according to its serial number in a letter file adjoining the manager's desk. If within a reasonable time it is not acknowledged, a form letter is sent calling attention to the date on which it should be shipped to the routing given, and asking for an acknowledgment and definite promise of delivery. Two carbon copies are made of all outgoing letters. One is sent to the general file, and one is attached to the traffic department's copy of the order. All incoming letters are attached to this copy as soon as

**Handling out-of-the-routine orders**

they are received, and are read by the traffic manager.

In this way the manager has the entire correspondence at his finger ends. He is never in doubt as to whether his information is correct and complete. When a part of the material is received, a memorandum is made on the order, showing the date and amount received. When the shipment is completed, all copies of the order and all correspondence are stamped "complete," with the date, and the entire lot is sent to the general file. The use of this method for several years has shown that it works with a minimum cost and the fewest possible errors.

Now and then, in every concern, there are bound to be some orders which require special attention because prompt delivery is essential. In a western office these special orders are kept in plain sight by means of a plan board which hangs directly in front of the purchasing agent's desk. It furnishes an accurate picture of promised dates of delivery, and prevents the possibility of any undue delay occurring in the receipt of goods that are needed in a hurry.

This board, which can easily be home-made if desired, is about 2 feet square. The bottom hangs on a level with the writing surface of the desk. The surface of the board is painted a dull black in order that the cards and tags placed on it may stand out in clear relief. Numbers from one to thirty-one indicate the days of the month. These are repeated at top and bottom to help the eye in locating the date quickly. The piece of wire, painted white, is designed for the same purpose, and is moved forward to the proper nail the first thing every morning.

**A plan that visualizes the purchases**

It is not necessary to have the months named, as the board, of course, always applies to the current month. The following and past months are indicated by different shaped tags, as will be explained later.

In this concern's buying there are three groupings: "general orders and printed matter," "steel," and "castings." A small slip, printed in different colors, is used in connection with each order to be followed up in these three classes.

"General" orders are followed up with yellow slips, and a yellow tag is placed on the nail opposite the slip

and under the proper date, showing at what time the material has been promised. "Steel" items are followed up with blue slips, and blue tags are placed on the proper date. "Castings" are followed up with pink slips and pink tags.

**How the plan board works**

On the first line on the board, under date of the 25th, there is a pink tag, which indicates that the first item under the heading "castings" was promised on the 25th of the current month. As the white wire shows that today is the 29th, the promise of shipment is four days overdue. When goods fail to arrive on the promised date, tags are never moved ahead until a new promise of shipment has been received.

On the second line, under date of the 23d, there is a yellow tag, which indicates that the second item under the heading "general" was to be shipped at that time—this promise of shipment is also overdue. On the same line, under date of the 30th, is a pink tag, indicating that the second item under the heading "castings" has been promised for shipment on the 30th.

On the fourth line, under date of the 1st, there is a yellow tag above a pink tag. The pink tag is shaped like an inverted T, and is used to show the buyer that the item is promised for shipment on the day indicated in the following month.

**Red tags are used for urgent orders**

Again, on the same line, under date of the 24th, a blue tag is hanging over a round yellow tag. The round yellow tag indicates that the material is ready for shipment, and will be included in the first carload. This information is of value, as the material may be required before the carload shipment is completed, and it can, therefore, be forwarded by local freight at any time.

On the second line, under the heading "general," there are two small tags inserted in the cardholders along with the yellow slip. These tags are red and mean that the material is needed urgently. One red tag would mean that the material is needed promptly, but not urgently. If in four different places on the board there was a small tag with the number 1000, it would mean that all four items are needed for a certain factory order. While it is, of course, expedient to get each one of the orders delivered as promptly as possible, these figures also

**10 minutes a day keeps this system up to date**

show that the customer's order cannot be shipped until all four items are received. Other similar groups of orders would be distinguished by the numbers 2000 or 3000.

The board is continually being kept up to date, as word regarding shipment dates comes in from suppliers. Just as soon as definite advice is received that an item has been shipped, the printed slip representing it is taken out of the cardholder and placed on an auxiliary board, where it is kept until the material is actually received in the factory. The printed slip is then given to the production department, as a notice that the material is on hand.

Since putting this system in operation, the purchasing agent has found it unnecessary to file laboriously, or memorize, a great number and variety of shipping promises. It has never taken more than ten minutes in any one day to keep the system up to date, even when crowded to its capacity. Ordinarily, five minutes is ample.

There are a lot of little knacks of handling the office end of buying which save time and money. Here are four that have been tried and are told of by the men who used them:

*1. A Card that Remembers*

**How to keep an accurate record of all the suppliers**

"I must feel absolutely certain before I place an order," says a purchasing agent who every year signs orders for millions of dollars' worth of materials, "that the goods the supply house will send me are the kind I require for the particular purpose in hand. We use definite, standard specifications in all of our purchasing where specifications are feasible. A receiving inspector quickly catches any materials that fail to meet our specifications.

"Failures of this sort are made matters of record on little cards that we keep for the purpose. Every house we buy from has a card in our files, and the card carries a report of our relations with it, including notations of any failures to furnish us the quality standard we require."

*2. Getting Prompt Deliveries*

"Every buyer should go over all uncompleted orders frequently," says the head of a great retail merchandise

concern. "If he finds only a small balance unshipped, or the order very much overdue, he should generally cancel.

Making sure of quick shipments

"We have found it very effective to write on orders, instead of 'at once,' 'cancel all goods not shipped by August eighth.' The date is not established arbitrarily, but is agreed to by the salesman and the buyer when the merchandise is purchased.

"We let the selling agent understand that he must abide by this clause, and that if anything remains to be shipped at the specified time, he must write us to secure our permission to make deliveries. This soon teaches the manufacturer to respect the instructions that we place on the order."

*3. Keeping Information Handy*

This device saves a lot of valuable time

A glass desk pad saves the busy purchasing agent of a large construction company much time. A great deal of information that he needs every day he keeps in plain sight by this means. The top of his desk bears the following:

Price lists of all kinds of bolts and pipe fittings that are bought frequently;

A chart showing promised delivery dates and routing of all important outstanding orders;

Chart showing fluctuations in price of iron, copper, and hemp for fifteen years;

Organization chart of his company, giving names and positions;

A classified list of principal supply houses of all kinds in the territory.

*4. Working on Schedule*

Many purchasing agents have a definite time to see salesmen

"I proportion my time as definitely as possible," says the purchasing agent of a public utilities company. "A specific hour to transact each kind of business helps me a great deal, I find.

"I spend from 8:00 to 8:30 reading reports on the market and general business conditions; 8:30 to 9:30 reviewing the mail; 9:30 to 10:30 dictating; 10:30 to 11:30 approving and placing requisitions, 11:30 to 12:00 interviewing of salesmen; 1:00 to 1:30 approving requisitions received in the noon mail; 1:30 to 4:00 handling miscellaneous matters, including the interviewing of salesmen; 4:00 to 4:30 approving invoices; 4:30 to 5:30 signing correspondence, orders, tracers, and so on."

## CHAPTER XIX

# TESTED ROUTINE FOR WATCHING COLLECTIONS

**Usually a small office needs standard methods as much or more than a large one does**

IN small offices, which, of course, are in the majority, the duties of collection manager, purchasing agent, and office manager are very likely to fall upon one man. If these duties can be so systematized that the detail work is taken care of by a clerk or stenographer, the manager is, of course, left free to put in his time on really important work. It is to find the best routine that the small office man should look to the specialized departments in larger offices. The real difference between a small and a large office is only a matter of volume of work; and it is to handle the greater volume that the large one has had to systematize.

Collections have been reduced to a standard routine in the office of a Wisconsin automobile accessory jobber. Detailed instructions are written out for the guidance of all employees concerned in handling the accounts. The files have been thoroughly reorganized and put on a more effective basis. With the present system, the manager finds that accounts are paid more promptly; and, further, he is able at all times to determine the exact status of overdue accounts, their amounts, and the stage they have reached in the process of collection.

**The sort of routine that tightens collections**

The general principle behind the plan is this: Each account that is more than a certain number of weeks old —a period which is called the "standard of credit"—is reported to a "collector," and for that purpose is entered upon a card and filed alphabetically under the name of the debtor.

A second and similar card shows the name of the debtor and the date when the obligation was incurred. This memorandum card is filed in a separate drawer, behind a guide card showing the day of the month when the matter should next be brought up for attention.

Another set of drawers completes the filing system. In these last drawers is kept complete information on specific cases. This file is a useful record of all debtors who have given the concern any trouble about collections in the past, and is an invaluable source of information for the credit man.

**Collection instructions for the office force**

This office mechanism is supplemented by two sets of instructions issued for the office workers. One is for collectors, and the other for the ledger clerks. Instructions for collectors are as follows:

1. When reporting an old debt to the collector each ledger clerk will furnish a statement and will enter particulars upon a card, which will be filed alphabetically. A note will be made in pencil in the debtor's ledger account, showing that the debt is in the hands of the collector. A second card will be written out bearing the debtor's name and the date when the debt was incurred; this will be placed in the diary drawer in the division for the current day. When any sum is received on account, the amount must be written on the debtor's alphabetical card by the ledger clerk.

It will thus be seen that the collector has to deal each day only with those debtors whose memorandum cards are in the divisions in the second drawer referring to that day.

As each case is dealt with, a note to that effect will be made in ink on the card in the first drawer, and the date when the next application for payment should be made will also be entered in ink. The memorandum card should then be placed forward under the proper day in the follow-up file.

2. When, from any pressure of work, any card in the follow-up file cannot be dealt with on the proper day, it must be put ahead to the next day. Under no circumstances may it be put forward more than a single day.

3. Each collector will receive monthly statements of debts placed in his hands. When he receives his statements, he should at once look through the card cabinet to find the records corresponding with his statements. He should then dictate suitable letters to the debtors, or mark upon each statement, in pencil, the number of one of the series of form letters used in soliciting payments. The statements should then be handed to a typist for copying. At the same time, particulars of the letter written to the debtor must be noted on the printed card, and the memorandum card, in turn, must be placed in the proper division, to come up when the case is next to be attended to.

The typist should look at the diary drawer each morning, write all letters not requiring special attention and put them before the collector for his signature.

4. When a debt is finally written off as irrecoverable, the card must be numbered and particulars entered in a bad debts register, in which will also be noted the authority from the audit department

**—which may help solve your problems**

**Written instructions are necessary to make any changes in the routine**

giving permission for writing the debt off. All correspondence connected with the collection is kept in alphabetical order in letter files separate from the general files. When a collection is made or the account written off, the correspondence is fastened together, numbered to correspond with the bad debts register, and filed for audit and credit purposes. The card covering the case is filed "dead" in a drawer reserved for complete cases.

5. Unless there are special written instructions to the contrary, given by the manager, the time between each effort at collection must not exceed two weeks.

Instructions issued for the benefit of the ledger clerks are copied in the ledgers. They are as follows:

1. No debts are to be reported orally to the collector.

2. When any debt becomes overdue, the word "collector" is to be written in pencil in the ledger, close under the items overdue. At the same time, two cards are to be written out—a printed card bearing full particulars, and a plain one bearing the name of the debtor and the date when the debt originated. The printed card is to be placed by the ledger clerk in the alphabetical file. The second card is to be clipped to a statement and handed to the collector.

3. When any debtor remits, after his account has been placed in a collector's hands, the ledger clerk must at once note on the card, in the "results" column, the date and the amount paid; and he must also erase the word "collector" from the ledger page.

4. Monthly statements for those debtors' accounts marked "collector" are to be handed to the collector for immediate attention.

**This plan enables one manager to avoid detail**

Efficiently handled, this system makes it possible for the manager of the concern to maintain complete control of the collection machinery without himself bearing the burden of the many details incident to it. His sources of control are as follows:

1. The alphabetical list of debtors, where he can find out if collection letters are going out on schedule.

2. The follow-up or "diary" file, where it is possible for him to see at a single glance approximately how many cards are unattended to, and what proportion of debts have proved to be slow in collection or are particularly old.

3. The ledger in which all old accounts are marked "collector."

Complete lists of debts which have exceeded the "standard of credit," sent in twice each year by the branch offices, make it a simple matter for the home office to control collections in branch offices as well as at home. The lists are prepared by junior clerks, who go straight through the alphabetical file and extract all details that are required for the report on the day following the close of each half

year. Sometimes, upon receipt of these lists, application for payment is made direct from the head office, if that method seems likely to bring in the money.

**It is now possible to "know" the results six months earlier than before**

A few days later, the manager at the head office prepares a list of all old debts in regard to which special instructions should be given the branch managers.

The information obtained by this system is nearly six months in advance of what could be obtained by ordinary methods, and it has, therefore, been found of enormous value to the manager as a means of control. It does away entirely with a difficulty common to many concerns, namely, that the lists of overdue accounts are so badly out of date, and refer to such very old debts, that they become useless except as instructions to the managers to place these accounts as a whole in a lawyer's hands.

Summed up briefly, the merits of the system are these: The manager is put in touch with debts as soon as they remain uncollected over an unusual period; he can see at a glance whether the collection of debts is being regularly attended to, even though the whole of the work is delegated to a special department; and it prevents a great majority of the debts from becoming so old that they are practically outlawed. Losses in this concern, due to bad debts, are no longer the serious menace that they were before this system was installed.

**There's a lot of detail connected with instalment sales**

The credit manager of an instalment house says that his records and statistics show exact collection conditions in every one of the concern's sales territories.

"We sell nationally," says he, "on instalments, and have both 'open' and 'secured' accounts. We have numerous branches, which are permitted to handle collections up to a certain point. All accounts, however, are referred to the main office as soon as they become 30 days past due.

"The record that shows us most clearly the general condition of our collections is a graph. It gives us a month-by-month picture of three facts that are important for us to know. These facts are shown by different-colored lines on the graph, as follows:

1. The percentage of sales-ledger cash collected, to the balance remaining on the books. That is, the total amount of money collected in the regular course of business on "open" accounts.

MONTH OF March 1918

| BRANCH | YEAR | BALANCE 1ST OF MONTH (UNCOLLECTED) | CASH FOR MONTH (COLLECTED) | % (OF CASH COLLECTED) | CASH FOR 4 MONTHS (CUMULATIVE) | 30 DAYS PAST DUE (AMOUNT) | 30 DAYS PAST DUE (%) | NUMBER OF ACCOUNTS | NUMBER OF ACCOUNTS 30 DAYS PAST DUE | NUMBER OF ACCOUNTS 90 DAYS PAST DUE |
|---|---|---|---|---|---|---|---|---|---|---|
| Auburn | 1917 | 2,189.60 | 6,662.90 | .76 | 20,010.87 | 4,129.60 | .206 | 189 | 23 | 11 |
| Fells | 1918 | 1,560.20 | 10,150.09 | .88 | 57,220.10 | 3,650.09 | .063 | 110 | 10 | 4 |
| Mason | 1918 | 986.10 | 10,970.81 | .92 | 39,160.02 | 2,180.63 | .055 | 124 | 8 | 3 |

FIGURE 157: The way this form is used is described in detail on page 285. It shows at a glance on a single sheet the exact condition of collections for each of the branch house territories. This gives the general office a line on business conditions over the country and, besides, indicates quickly if credits are being slighted at any of the firm's branches.

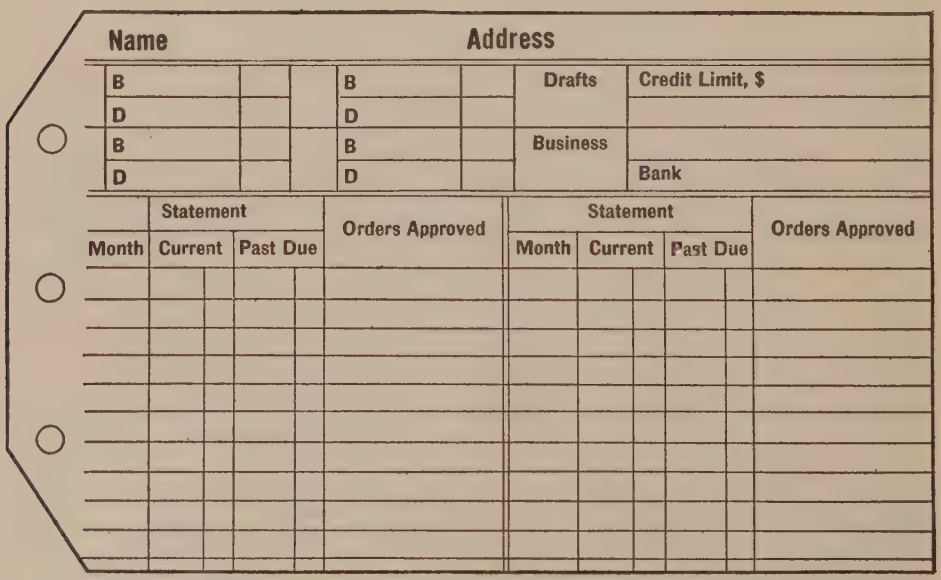



FIGURE 158: Perhaps a customer's credit card like this one will serve your needs best. It is designed for use in a folder, in which it can be fastened by paper staples. Space is provided not only for the usual credit information and ratings but for a synopsis of the dealings the concern has had with the customer, and keeps it ready for instant use.

2. The percentage of accounts 30 days past due, to the total sales-ledger balance outstanding.

3. The percentage of delinquent bills receivable ("secured" accounts) to the total amount of bills receivable outstanding.

**Here's another effective use for graphs!**

"As I stated, these figures are worked out in the form of a graph, so that the end of each month we know exactly how our results for the present year compare with the results secured in previous years.

"We can tell where the weak spots are, and we know in what directions we need to put forth our greatest efforts toward collections. Naturally, also, the graph is interesting and helpful to us in our credit work.

"Even more important, however, from the credits point of view, is the tabulation of collection statistics by branches. A sample of this record is shown in Figure 157. It is sufficiently large to contain the record of each branch for a period of five years. The balance due and uncollected at the first of the month is shown, and next comes the figure showing the amount and percentage of this uncollected balance that is secured by the collection department during the month.

**Collection records should be simple**

"This record also shows the amount of money that is 30 days past due, and the relation—in percentage form —that this figure bears to the total amount outstanding. Finally, we tabulate the total number of accounts, and the number of accounts that are 30 and 90 days past due.

"One record of this sort is kept for each month of the year. Figures showing a condition worse than that of the same month of the previous year are entered in red, so that sore spots become evident at once.

"Naturally, our credit work is also greatly helped by these figures, because we are doubly careful in passing accounts in any locality where collections are proving difficult.

"Another simple record which we keep is along much the same line, and has been very helpful. This record is kept by branches and states. Territories are allotted to our branches along state lines, so it is easy to keep the figures.

**—and these are**

"We show, first of all, the total amount of money outstanding at each branch and in each state; then the amount that is delinquent in each case, and, finally, the

**Too many records may spoil any system**

relation of this figure to the total amount outstanding.

"These figures are helpful in credit making in the same way as the record described above. They are also indicative of where it is necessary for us to exert ourselves most in making collections.

"We find that these records are sufficient as guides. Their compilation takes very little time at the end of each month, and with the figures before us we have a clear picture of our work and the comparative conditions in every one of our territories.

"More records would only confuse us. We have, in fact, tried drawing up several different kinds of statistics in addition to those I have described; but we have found that money may easily be spent in this way which does not show returns. So we find it best to confine ourselves to these.

"In connection with credits, we keep a monthly record showing the number and amount of orders canceled and declined. The latter figure is given in detail to indicate how much has been declined by the general sales department, and how much by the credit department. This is helpful in showing up any unusual conditions which should be remedied, and it shows where to go to apply the remedy.

**A folder for "concentrated" credit information**

"These records I have described are very simple and can be compiled at little cost by any concern. For us, they have been definitely helpful in collecting our money to better advantage, and in advancing credit more intelligently."

In the opinion of an Illinois manager, systematic arrangement of information about customers is essential for the credit man who handles a large number of accounts, if he is to pass on each order quickly. To keep his own files clear of dead material, and show him at a glance the latest report on the financial condition of any customer, he has devised the folder (Figure 158).

Each flap of the folder has a tab punched with holes in which paper fasteners can be inserted. Papers which it is essential to keep permanently are attached to the left flap. Ordinary records such as requests for payment and adjustment letters are attached to the other flap and are destroyed as a unit at the end of six months.

Here is a specialized filing system for the credit department

Every customer is allotted one folder. His name and address are written on the face in the space designated. Spaces, also, are provided below to show the credit limit which has been set for the customer, the estimated amount of his annual business, the bank or banks through which he deals, and whether or not he will pay sight drafts drawn on him.

The three columns under the word "statement" are filled in anew at the first of each month, and they indicate the exact condition of the customer's account. They show the total of bills falling due, as well as of bills that should have been paid, and the sum of both columns represents the total of the statement sent to the customer. The credit man thus has before him on the face of the folder itself enough information to pass or reject most orders. For special cases, further information is filed inside the folder.

The credit and collection department of a western company uses a geographical filing system. This concern does a national instalment business and sells to small retailers, many of whose stores are constantly changing hands. Accounts with these customers run from one to three years, according to the terms of sale, and each correspondence folder is apt to become bulky and hard to handle before the period is up.

To facilitate reference, the department has resorted to the practice of abstracting all correspondence with customers. A year ago the collection men were almost never even with their work. Their desks were cluttered with folders which had to be gone through before letters four, five, or six days old could be handled intelligently.

This card gives all necessary information

Abstracting has completely overcome the difficulty. Today, collection and credit correspondence is handled promptly, and replies are usually mailed the same day a letter is received. A card is used which was designed especially for this service. The face of the card contains space for all the details of the contract with the customer. The reverse side is filled in by the clerk who does the abstracting. Carbons of all letters come to him before they go to the files.

In performing his work, he uses many symbols and abbreviations which are commonly understood in the

**A simple code that saves time**

department. The T column on the card means "to" and the F column "from." The letter A in the F column indicates a report received from an attorney about the customer whose name is on the card. The date of the letter is shown, and a brief summary of its contents is given in the column at the right.

If the letter A, in the case just mentioned, had a circle drawn around it, this would show that an enclosure came with the attorney's report. If the date were circled, it would indicate that the communication was a telegram. Other abbreviations along the same line make it possible to transfer a great deal of information to this card in very small space.

**One bank's tested credit record**

The entire history of the mail relations of the company with the customer, in fact, is shown on this one card; and in a given case the collection man knows exactly how to proceed, insofar as the previous correspondence can tell him. Of course, if it becomes necessary at any time to refer to the actual letters, they are available, just as they formerly were; but as a rule, the cards are sufficient for all purposes.

There should also be a suggestion for credit managers in the way a Chicago bank keeps its credit files.

One strong feature of this bank's system is that the credit information is so kept as to be easily and quickly available. Another strong feature is its apparent adaptability to any line of business.

This bank keeps information on more than 250,000 accounts complete to the last day of the preceding month. A simple system of printed forms is used, and the forms are filed for quick reference. Formerly assistant cashiers handled certain groups of its customers—dividing them alphabetically; now the accounts are classified by industries and professions. So successful has this system proved that it has never been altered, in spite of an enormous increase in the number of accounts.

**—which may give you a valuable suggestion or two**

In the classification adopted, six arbitrary divisions are made. Related industries and professions are put in each division. Division C, for example, includes concerns making or handling agricultural implements, buggies, automobiles and other vehicles, iron and steel products, lumber and furniture, and manufacturing and

FIRM The Smith Co — CREDIT LIMIT $

St No. — CITY New York City

| SEASON | FALL | SPRING | FALL | SPRING | FALL | SPRING |
|---|---|---|---|---|---|---|
| YEAR | 1915 | 1916 | 1916 | 1917 | 1917 | |
| Brad | J-a | J-a | J-B | J-C | J-C | |
| L y | C-% | C % | C-5 | C-6 | C-5 | |
| R-B | a-1 | a-1 | a-3 | a-6 | | |
| Dun | B-1 | B-1½ | B-2 | B-2 | B-2 | |

| DATE | BY | TERMS | AMOUNT |
|---|---|---|---|
| 7/8/15 | Jones | 5% 30 | 1216 50 |
| 9/11/15 | " | " " | 1059 25 |
| 10/26/15 | " | " " | 1575 75 |
| 11/16/15 | Mail | " " | 150 00 |
| | Fall | 1915 | 4001 50 |
| 1/12/16 | Jones | 5% 30 | 1314 25 |
| 3/4/16 | " | " " | 1650 50 |
| 3/20/16 | Mail | " " | 225 00 |
| 4/16/16 | Jones | " " | 825 25 |
| | Spring | 1916 | 4015 00 |
| 7/7/16 | Jones | 5% 30 | 996 75 |
| 8/29/16 | " | " " | 1250 75 |
| 10/2/16 | " | " " | 1375 50 |
| 11/14/16 | " | " " | 375 00 |
| 12/6/16 | Mail | " " | 57 50 |
| | Fall | 1916 | 4055 50 |
| 1/9/17 | Jones | 5% 30 | 1250 00 |
| 2/20/17 | Mail | " " | 345 25 |
| 3/16/17 | Jones | " " | 750 00 |
| 5/2/17 | " | " " | 400 00 |
| | Spring | 1917 | 2745 25 |
| 7/12/17 | Jones | 5% 30 | 850 00 |

## CLEARING HOUSE REPORT AND CLAIM RECORD

| DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 10 | 18 | 19 | 20 | 33 | 37 | 38 | 62 | 70 | 75 | 86 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/13/15 | 20 | 7 | 3 | 1 | | | | | | | | | | | | | | | |
| 3/2/16 | 10 | 19 | 14 | 7 | 4 | 1 | | | | | | | 2 | | | | 1 | | |
| 9/16/16 | 3 | 9 | 18 | 12 | 8 | 4 | | | | 1 | 1 | 1 | | | 1 | | | | |
| 3/4/17 | 2 | 10 | 16 | 13 | 10 | 3 | 1 | | | | | | | | | | 1 | | |

Discount; Prompt; Satisfactory; Oc. Slow; Slow; Ex. Slow; C O D.; Cr. Withdrawn; Caution; Violence T.; Arbitrary; Troublesome; Pays Note; Hard to Collect; Ref. to Sell; Burned Out; Claim; Sued; Failed

| DATE | PLACED FOR COLLECTION | DATE | PLACED FOR COLLECTION |
|---|---|---|---|
| 3/7/16 | 396 00 | | |
| 10/11/16 | 150 00 | | |
| 1/16/17 | 196 00 | | |
| 3/2/17 | 343 50 | | |
| 5/617 | 146 25 | | |

### DRASTIC ACTION

| Advised Would Sue | Amount | Attorneys' Letters | Amount | Attorneys' Drafts | Amount | Account to Attorneys | Amount | Collected | Amount | Cost | Uncollectible |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/20/17 | 400 00 | | | | | | | | | | |

SPECIAL INFORMATION — SPECIAL INFORMATION

**FIGURE 159:** Each customer has a folder of his own in the files of this credit man. The two forms shown are kept in the folder, and give a synopsis of the business dealings the concern has had with the customer as well as the credit ratings, and other special information. Other pertinent data such as letters and reports are also kept ready in the folder.

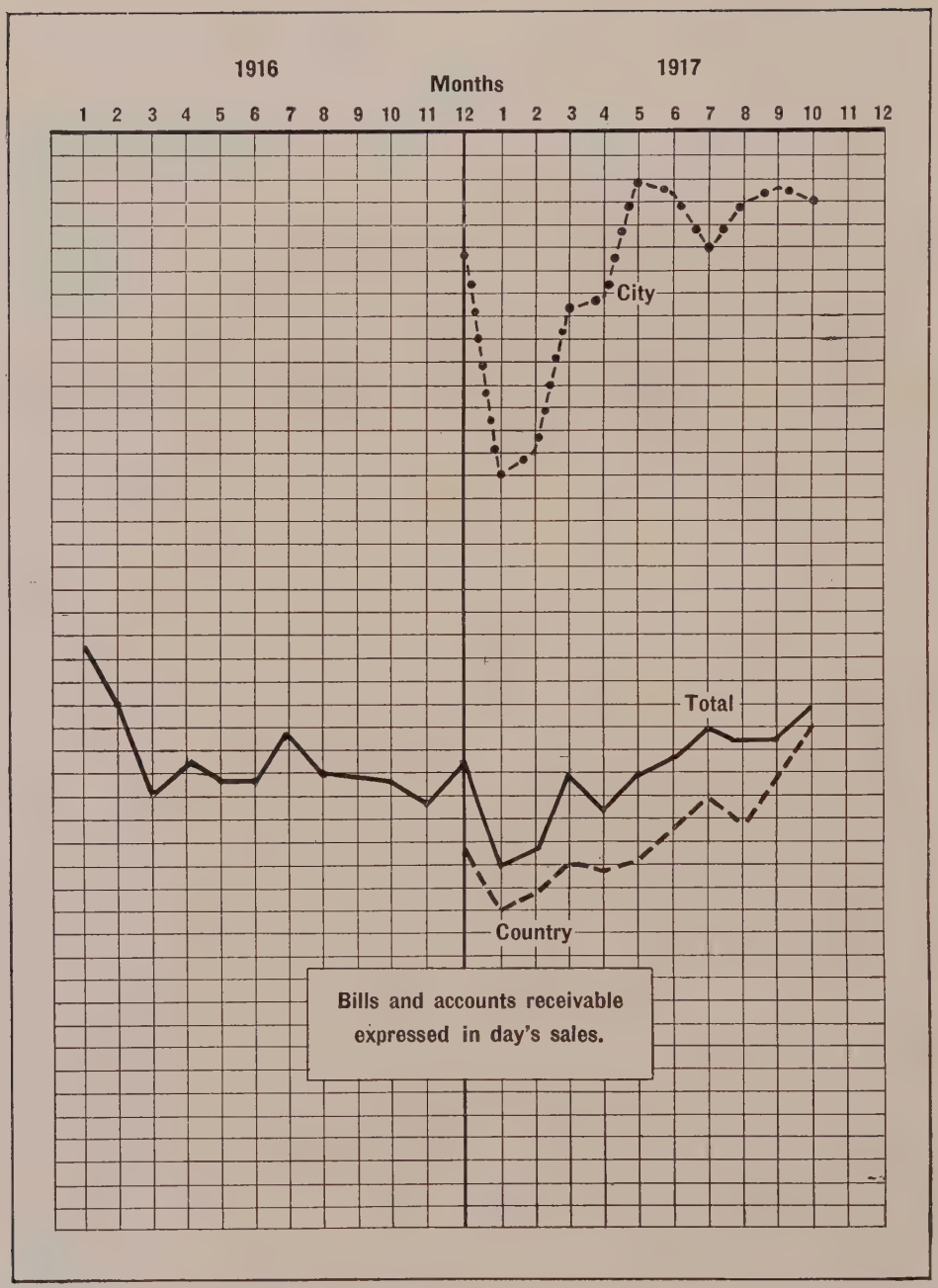

1916
Months
1917
1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12
City
Total
Country
Bills and accounts receivable expressed in day's sales.

FIGURE 160: This graph watches fluctuations in accounts and bills receivable. The curves show the ratios between collections and sales. When the amount of "receivables" increase without a corresponding rise in "sales," the curve slopes upward and it's a signal for a closer check on collections, as you readily understand from the graphs.

sundries. Division E is the "eat and drink" class. It includes groceries, drugs, produce, commission and cold storage, liquors, brewers and brewers' supplies, tobacco, restaurants, bakeries and hotels.

**Of course, in some types of business subdivision is necessary**

Each of the six divisions is in charge of a vice-president and an assistant cashier, who make careful study of the markets in their particular field. They are thus able to judge soundly of the business methods of their patrons, and frequently give advice which saves both bank and customer money.

In the general index file there is a small card for every account, both open and closed, with condensed, complete information regarding the individual, firm, or corporation now or formerly doing business with the bank.

A Chicago wholesale house recently had occasion to inquire into the standing of a retail hardware dealer named Richards, who had named this bank as a reference. The sales manager telephoned to the bank's credit department manager, who turned to his alphabetically arranged index file in the cabinet beside his desk and from it took the general index card which had been made out for Richards. In less than a minute he knew when the prospective customer of the wholesaler opened his account, the size of his deposit, who his guarantors were, his average balance, the maximum amount borrowed, and other information which indicated in what esteem the bank held him. With these facts in mind he could frame his general reply to the wholesaler carefully, and still preserve his confidential relations with the depositor.

**Symbols that show exactly where information may be found**

In case the wholesale house had inquired about the details of some particular transaction in which it was concerned the credit manager could simply have glanced at the key letter stamped on the index card and turned to the proper division file. This key letter might be A, B, C for one of the active account divisions; or it might be R, indicating agency reports; F, a closed account; or X referring to the miscellaneous file.

In just this way more than 200 personal and telephone inquiries are handled easily and quickly every day.

Files in the credit department of another bank are organized to furnish all the necessary information with the least possible delay to everybody concerned.

**How colors help one credit manager**

It is imperative that the files tell the facts quickly, as the credit department is constantly being called upon to give credit facts about present or prospective users of the bank's services. To get these facts quickly, colored pencils have been brought into service. Whenever a letter or report indicates facts about an individual, which are favorable from the bank's credit point of view, that portion of the letter is underscored with a blue pencil. In like manner, when unfavorable credit facts turn up in a letter, they are underscored with a red pencil.

By running through a folder in which letters have been so marked, it is possible to gain some idea as to the credit character of the person or firm in question, simply by noting which color predominates. Further, the salient points can be picked out from a mass of irrelevant matter with the least possible delay.

**Red is a sign of danger**

The same idea is carried still further in a special "suspense" file, which is kept entirely separate from the other cabinets and contains only the folders of persons or firms whose solvency is in question. Here, the folders themselves are red.

In handling accounts, the officers in the bank usually call for the complete folder on every case. When one of these red "suspense" folders is laid on his desk, the officer knows at once that transactions with this account must be watched with great care.

There is another complete system for watching collections in either the large or the small office. It is described by the man who designed and uses the system. It saves dollars and time in collecting money for him and should help you in the same way.

**This system gives instant information on 4,000 customers**

"About two years ago," he says, "I was placed in charge of the credits of over 4,000 customers. I soon concluded that information not properly compiled and easy of access was of little, if any, value. It was up to me to make it so, and I finally perfected a system that is simple and inexpensive to operate—a system where all credit information is instantly available. It gives a complete individual history of each of the several thousand customers on our books.

"The following, I have found, covers practically everything that the credit manager needs to know about the

customer. And all of the data, listed on both sides of a card 8 by 11 inches, make up my system. The 10 classifications are:

**Ten vital facts the credit man must know**

1. Past and present ratings as reported by the commercial agencies.
2. Total amount of business received each season, the name of the salesman, terms, and the amount of each order.
3. How the customer pays others from whom he buys.
4. Whether or not claims are placed against the customer, frequently, for collection, through the commercial agencies.
5. Whether we have ever been obliged to threaten suit or to take more drastic action in collection of an account, and if so, the steps that were necessary.
6. Credit information from outside sources.
7. Amount outstanding, past due, from last collection letter.
8. Special reports from commercial agencies.
9. Credit limit.
10. Whether or not ratings are high enough so that account is covered by credit insurance.

"A special folder for each customer's account contains copies of statements and of letters relative to the account, and also the information card. A 12-drawer vertical filing cabinet holds all the folders. Ten of the drawers contain the folders of customers who owe us nothing. One A to Z 40-division set of guide cards is distributed among the 10 drawers, and back of each guide a card index with names alphabetically and numerically arranged shows the number of each particular folder.

**A special file for the collection manager**

"The other two drawers, my 'live collection file,' contain folders of past due accounts. Each day, when I receive the remittance vouchers, I go through this file and take out the folders of customers who have paid. Thus at any time I can safely write again to the customers whose folders are in the 'live collection file,' as I know positively that their checks are not already in the hands of the bookkeeper.

"The face of the card shows the name of the customer, his credit limit, and his credit rating as reported by the commercial agencies. It also shows the dates, terms, and amounts of all orders and the names of the salesmen who took them.

"When orders are received from the sales department, a clerk takes the corresponding folders out of the file,

**Keeping track of the credit limit**

places the orders inside and brings them to me. By looking at the card, present and past ratings are before me for comparison. I know the amount of business usually received each season and if the customer's credit is limited. I know whether or not orders have already been passed up to this limit, and if I again wish to look at special reports, as they are filed in the folder, I have them right before me to analyze.

"The total amount of business for each season is recorded in red ink. These totals in red stand out plainly and it is easy to compare the business for the different seasons. And, if an order is received for an amount out of all proportion to that particular concern's previous business and financial responsibility, it prompts me to investigate further before passing the order through for shipment.

**Why it is important to have comparative figures**

"All ratings as given by the commercial agencies are looked up anew and recorded on the cards at the beginning of each season. Even though a customer may fail to give us any business for several seasons, ratings and other data, if received, are recorded just the same. Then when we do get an order, we know, by referring to the card in the folder, whether or not the customer is as good as formerly.

"This information has proved of great value many times. For instance, suppose David Harcher, who has been a good customer for three or four seasons, suddenly transfers his business to some competitor. We occasionally note through clearing house reports that his paying record with other firms is not so good as formerly. Later, claims appear in the paper issued weekly by our agency. This may continue until Harcher no longer bears even a fair name with the trade. All this information, as well as his ratings each season, has been kept up to the minute on our cards.

**An indication of credit trouble**

"Then some fine day Harcher sends in an order, a nice fat one, as of old. It would hardly be necessary at such a time to go to the expense of getting special reports, for I would know instantly that Harcher is trying to do one of two things; to get ready for a failure or to buy from us because his credit is getting so poor that he finds it next to impossible to get credit elsewhere.

**Some outside aids to the credit man**

"A record of clearing house reports and of the procedure necessary in collecting the accounts occupies the space on the back of the card.

"Each week we receive a clearing house report, covering about 200 names, showing how our merchants—they happen to be furniture dealers—are paying other concerns from whom they buy. Almost every furniture dealer in the United States is traced at least once a season, and more often, if requested by a subscriber. If a clearing house report shows that ten concerns admit that James Skidgley, one of our customers, discounts his bills, the date of the report is tabulated on the card and the figure 10 placed in the column.

"A weekly paper sent out by our commercial agency lists all business changes during the past week. The names of all dealers on whom claims have been placed with them for collection and all other information bearing on the credit responsibility are also given. All claims for collection reported by the agency against any customer of ours are tabulated on the customer's card under the heading, 'Placed for Collection.'

**A tested office routine for desperate credit cases**

"It often happens, where a customer does not pay until written several times or suit is threatened, that in a comparatively short time the folder gets so congested with carbon copies of collection letters that it is necessary to transfer a portion of them. The ordinary routine letters are of no particular consequence, but if suit has been threatened, attorney's drafts sent, or if the account is given to an attorney, the correspondence is valuable. Unless I have the time myself to go over every copy and retain just the ones wanted, much valuable information might be lost. However, by having a clerk keep a record under the space reserved for 'drastic action,' of letters where suit has been threatened, the copies in the folder can be transferred at any time."

## CHAPTER XX

# HOW THE OFFICE CAN HELP SELL

**Office records that help salesmen**

THE sales manager for a baking powder manufacturer says that he has 70 bookkeepers to handle the records of 100 salesmen. That is not literally true, of course, because not all of the 70 are bookkeepers, but it is strictly correct to say that 70 people are used to keep records for 100 salesmen.

Few concerns, of course, would be warranted in having proportionately as great a force of clerical help to handle sales records, but the idea back of it is sound; namely, to give the salesmen all the assistance possible from the office. This can be done if there is only one salesman on the road and one man in the office.

Even with 70 clerks this sales manager feels that he is not oversupplied with records. Selling costs with his firm have not gone up—that is, net selling costs. If anything, they are slightly lower than they were five years ago. Volume accounts for the decrease, and it is for the purpose of getting the volume that he has so many office people watching the work of the salesmen.

This volume has been attained through intensive selling methods. To practice these methods successfully accurate records had to be kept, and attention had to be given to details. Hence, the seemingly large force in this office to back up the salesmen in the field.

This concern's records begin with the salesman himself. His daily report sheet is made out with a great deal of care, as many details are called for on it. Yet it is so arranged that it enables him to enter these details without much difficulty.

**—are carefully kept by this concern**

Every dealer in the country who can handle the goods is on the office list. Territories are so arranged that the salesmen will call on every one of these dealers on an average of three times a year. Quotas are set not only

for every territory, but for every district, state, county, town, and dealer.

**Correspondents who cooperate with the salesmen**

Quotas are based on population. The concern estimates how many cans of baking powder should be used in a year by each group of 100 people; and on this basis figures the total consumption of baking powder in the country. The share of the business the company should get is figured from this data. Worked out in detail it shows the amount which should be sold to every dealer in every territory.

Salesmen are routed very carefully and must not deviate from the prearranged plan, except in unusual cases. They must try to see every dealer personally. In cases where they are not able to see the dealer himself, they are required to report the exact circumstances which prevented them from seeing him. This plan gives a complete hold on all possible sales of baking powder.

The salesmen are backed up by two experienced correspondents in the home office. These correspondents have at hand all the data regarding dealers on whom the salesmen could not call, or to whom they were unable to sell goods. They spend their entire time writing personal sales letters. The results of this second process of covering territories with a fine-tooth comb are splendid. Each of these correspondents makes more sales in the course of a year than any one of the men in the field.

**The salesman's report is the starting point of this system**

The daily report form which is used by the salesmen is shown in Figure 161. In the group of columns under the word "sales," the actual transactions of the day are recorded. In the three columns that follow the salesman enters in the proper places the brands of products which are first, second, and third best sellers in each merchant's store. The final column enables him to report any cases where he could not make a sale. He can give his information very briefly and the correspondent knows about what kind of a letter to write in order to line up the merchant for possible sales.

On the back of this report sheet the salesman adds information of interest to the advertising department. He notes exactly what kind of assistance he gave to this department in connection with the advertising of individual merchants.

Is This Report Partial? Yes
Is This Report Final?

# SALESMAN'S DAILY REPORT

MUST BE MAILED NIGHTLY

Town: Hillsdale (This is town named) State: Mich.
Date: January 6th 1918
Salesman: Jas. Brown

Started from: Adrian
Arrived at: Hillsdale
Go from here to: Hudson

My address for Date (Sunday): Jan. 11/18
Will be: Reading, Mich.
c/o: Com. Hotel

| No. | Name of Dealer When you make second or third calls (2) or (3) as the case may be. All calls must be reported whether sales are made or not. | Class of Store | Was Test Made | SALES: Bbl. from Factory | Cases Jobber | Kind of Deal | Total Amount of Sales | Jobber Through Whom Shipped | X | Best Seller: Name | P.C. | Next Best Seller: Name | P.C. | Third Brand: Name | P.C. | Remarks If Not Sold Give Calumet Stock |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | R. J. Hurst | 2 | Yes | #2 | | K.R. | 36 00 | M. Gro. | X | Roy. | 60 | Rum | 20 | K.C. | 10 | |
| 2 | M. J. Brown | 2 | No | | | | | | | Cal. | 60 | K.C. | 10 | Roy. | 10 | Super out 14 dz. |
| 3 | J. Symposon | 2 | " | 3 bbl. | | Hahn | 108 00 | Nat. Gro | | " | 80 | Roy. | 20 | | | |
| 4 | M. Chestney | 2 | " | | | | | | | " | 40 | K.C. | 30 | Roy. | 10 | On cont. |
| 5 | J. Dumphreys | 1 | Yes | #2 | | Mill | 27 00 | L.F.W. | X | K.C. | 70 | Roy. | 30 | | | |
| 6 | Roger Sullivan | 2 | No | | | | | | | Cal. | 80 | Rty. | 15 | K.C. | 5 | 10 doz. |
| 7 | H. Wenat | 1 | " | 3 bbl. | | Cal. | 162 00 | Judson | | " | 90 | " | 10 | | | |
| 8 | M. Homer | 3 | " | | | | | | | " | 100 | | | | | 12 doz. |
| 9 | F. Parish | 3 | " | | | | | | | " | 40 | K.C. | 40 | Roy. | 10 | 4 dz. |
| 10 | M. Barryman | 2 | | | | | | | | " | 80 | " | 20 | | | On cont. |
| 11 | Hill Lbr. Co. | 2 | " | 2 SPs | | | 110 50 | Direct | | | | | | | | |
| 17 | John Fischer | 3 | No | | | | | | | W.B. | 100 | | | | | Small Bought out 15 dz. |
| 18 | F. Bloomer | 3 | " | | 1 | | 3 60 | H.H. Co. | | Cal. | 100 | | | | | |
| 19 | M. Hendon | 3 | " | | | | | | | Cal. | 70 | P.R. | 20 | K.C. | 10 | |
| 20 | M. Lasher | 3 | " | | | | | | | Cal. | 70 | " | | | | Small |
| Totals | Footings must agree with daily expense reports. | | 6 | | 1 | 8 | 570 60 | | 6 | | | | | | | |

**SUMMARY**

| | |
|---|---|
| Total Retail Sales | $464.10 |
| Total Jobbing Sales | 112.50 |
| Number 5 Lb. and 10 Lb. Sales | 3 |
| Number New Customers | 4 |

(Buyer out) Where this is reported the Sales Promotion Dept. Will follow up

NOTE: " A store is considered first class, having more than 5 clerks; 2nd class 1 to 5 clerks; 3rd class no clerks. Hotels using 5 lb. goods will be marked "H.S." Restaurants of same class "R.S." Bakers or institutions using 10 lbs. "B.10." Flour Mills "F.M.", and so forth. Use these abbreviations.
WRITE PLAINLY and remember a separate report sheet must be made for EVERY TOWN. To indicate a new customer, place "X" in the special "X" column

THIS SPACE MUST NOT BE USED BY SALESMEN
DEPARTMENT CHECKS

| | | | |
|---|---|---|---|
| Sales | | | |
| Order | | | |
| Adv. | | | |
| Special | | | |

FIGURE 161: The salesmen send in a report like this daily. It records sales, the lines that are selling best in each store and explanations of failures to make sales. Information of interest to the advertising department is written on the back of the report, and the size of each prospect's store is indicated by means of a predetermined signal, as you can see.

MONTH OF February 1918 SALESMAN: T.J. Hall

| | CUSTOMER | Date Assigned | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | LAST CALL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | R.D. Custer 202 Evergreen Ave. | 2-6-18 | | PC | | | SP | | PC | | ✓ | | | SPM | | | Mex | | | | | | | OR | | | | ✓ | | | | | | Sold |
| | Chas. E. Albright 1478 Pa. Ave. | 1-21-18 | | | | | | | | | ✓ | | | | | | | | | | | | QP | | | | | ✓ | | 7C | | | | 29 |
| | Mrs. Lanigan 2362 Fremont St | 2-9-18 | | | | SC | | X | | | ✓ | | | | | | | | | | | | | | | | | ✓ | SC | | | | | 28 |
| | Mr. Althoff c/o H.W. Batt & Co | 2-3-18 | | | QP | | | | | | 7C | Will be | | out of City until | | | | | | | | | Mar. 15/1918 | | | | | ✓ | | | | | | |
| B | J.H. Bother Co. Cal. Hotel | 1-2-18 | | | | | | | | | ✓ | | | | | | | | | | | | | | | | | ✓ | SC | | | | | 28 |
| | J.E. Beckett 674 S. Oak Grove | 1-12-18 | | | | SC | | | | | SP | | | | SC | | | | | | SP | | | X | | SC | | ✓ | | SC | | | | 29 |
| | Mrs. Dora A. Bennett 1413 Glendale | 1-21-18 | SC | | | | | | | | ✓ | | | | | | | | | | | | | | | | | ✓ | | | | | | 1 |
| | James Bennett 905 W. 8th Ave. | 1-23-18 | | | | | | | | | ✓ | | | | | | | SC | | | | | | | | | | ✓ | | | | | | 16 |
| | Mrs. B. Barlow 616 Northwood | 1-21-18 | X | | | | | | | | ✓ | | | | | | QP | | | | | | | | | | | ✓ | | SC | | | | 28 |
| C | W.F. Carter 2308 N. 4th St | 1-6-15 | | | | | | | | | ✓ | SC | | | | | | SC | | | | | | | | | | ✓ | | | | | | 15 |
| | J.W. Carroll 737 Bryden Rd. | 10-10-18 | | | | | | | | | ✓ | | | | | | | | 7C | | | | | | | | | ✓ | | | | | | 16 |
| | Alexander Caldwell 401 Arcade Bldg. | 1-11-16 | SC | PP | | SPM | PC | | SC | | ✓ | | SP | | | OC | | | | PC | | | SPM | | | SCC | | ✓ | | DP | | | Sold |
| D | B.H. Power c/o Cal Hdw. Co. | 10-10-18 | | X | SC | | | | SC | | ✓ | | SP | | | 7C | SP | | | | SPM | | SC | PC | 7C | X | | ✓ | | 7C | | | | 28 |
| | N.B. Daniels 170 S. High St. | 1-6-16 | | | | SC | | | | | ✓ | | | | | PC | | | | | PC | | | | | | | ✓ | | | | | | 18 |
| | Mrs. O. Wiltt 135 Colony Circle | 1-10-18 | | | | 7C | | | | | ✓ | | | | SC | | Please in "Inventor fell" | | | | | | | | | | | | ✓ | | | | | | Transfer 17 |
| | Mrs. S.R. Dixon 922 Talmadge Ave. | 2-1-18 | | | | | | | 7C | | ✓ | | | | | | | | | | | | | | | | | | ✓ | | | | | |
| E | F.C. Cogan c/o W.H. Home Store | 10-6-18 | | | | SP | 7C | | X | | ✓ | X | | 7C | | | | SC | | | SP | | SC | | | | | | ✓ | | 7C | | | 28 |
| | Mrs. C. McCall 512 Lexington Ave. | 2-4-18 | | | | 7C | | PC | | | ✓ | | | | | | | | | | | | | | | | | | SP | | | | | 26 |
| | C.C. Everett Lancaster, Ohio | 2-1-18 | LR | LW | | | | SP | | | ✓ | | ** 7C | | LW | | | | LR | | | | QP | | | | | | ✓ | | 5E | | | 28 |
| F | Mrs. W.A. Ferguson 117 W. Patterson | 1-6-16 | | | | SC | | | SP | | ✓ | | | SC | Mark Dead Routed Route instead of buyer | | | | | | | | | | | | | | ✓ | | | | | | Sold 26 |
| | Mrs. F. Faughnan 183 N. Eureka Ave. | 2-1-16 | X | | | | | | | | ✓ | | | | | | | | | QP | PC | | | PC | | | | | ✓ | | | | | | 21 |
| | F.W. Faulty 1348 Fowler St | 1-21-16 | | QP | | SP | PC | | | | ✓ | SC | | Decided not to purchase until Feb. 1st | | | | | | | | | | | | | | | ✓ | | | | | | Sold Dept. 1/22 12 |

FIGURE 162: As a check-up on a salesman's work this report has been found valuable by one concern. Each salesman has a card on which each of the prospects assigned to him are listed and every call and special information is entered. This card not only shows the status of the prospect but it tells the manager how much work the salesman does each day.

The salesmen, of course, are instructed to cooperate with the dealers wherever they can by distributing devices that will help the sale of the company's product, and also by suggesting window trims, methods of display, and the like. It is essential that the advertising department should keep in touch with this work. The salesman's report makes it possible to do so.

**How expense accounts are handled**

Expense accounts are also turned in daily by the salesmen. Here, as in the daily report of sales, it is easy for them to record the facts which are wanted so that the office can quickly summarize the expense.

Each week every salesman receives a new expense book. It is convenient in size and he can easily slip it into a coat pocket. Columns provide space in which he can enter, without unnecessary writing, what he has spent money for in the company's interest. On the stub he can record the total daily amount. At the back of the expense book is a space in which he is required to enter a complete summary of his sales for the week, itemized by dealers.

**Knowing how much salesmen sell**

In the office a clerk makes a summary of sales for each salesman every month and writes it on a card. Each of these cards contains the report of all the salesmen in one state. In addition to giving their record for the month of the current year, it also gives their record for the same month in the previous year.

The office makes a somewhat more elaborate sales summary at the end of each year. This form shows the salesman's quota for the year, his sales for the current year, and the previous year, the details of each trip, shipments for the year, and the open contracts outstanding at the end of the year. This information is given for each town in the various territories. The sales manager can very quickly check up on each salesman in comparison with the previous year and see whether he has fallen below or exceeded his former record.

**Keeping tab on the salesmen's work**

By statistics which show where the sales on different lines bulk, it is possible to concentrate selling strength on those lines which are weak in certain territories. This record also affords an excellent means of keeping tab on the efficiency of salesmen. A simple method of getting such a record at a small cost is indicated by the

**These customers' cards should be of value to you**

card which has been used for several years by a western sales manager.

Each customer is represented in the files by one of these cards. The amount of his purchases for each class of merchandise, omitting the odd cents, is entered every month in the space designated for that purpose. If the quantity of purchases is desired, rather than their dollars-and-cents value, this figure may be substituted. The total amount of purchases of all kinds for the month is calculated from these figures and entered in the lower right-hand column under the heading "total."

At the end of three months the various items are totaled for the first quarter's business, and the sum is written in with red ink. Since these amounts are intended for comparative use by the sales manager in planning his advertising and handling his salesmen, credits are not entered, the figures recorded being net sales. The totals of all the cards should, therefore, be slightly more than the total of the sales account of the bookkeeping department. Records for three years are placed on one side of the card, while the reverse side contains the next following three years. In this way a compact record for six years is kept.

A quick way of actually entering the figures is to file an extra copy of the bills behind each card. At the end of the month these memoranda for each customer are totaled by classes and the results are transferred to the cards. The bills are then removed from the file. In cases where they are very numerous it is often better to analyze them for each customer daily and enter the figures upon a sheet of paper filed for that purpose behind the card. At the end of the month the columns on this sheet are totaled by a machine and transferred to the proper place upon the card.

**Colored cards are used for special purposes**

The customer's record, printed on white cardboard is classified by towns and arranged alphabetically in the file under these divisions in each case. Other cards of exactly the same design but printed in different colors stand at the head of each important division and summarize its contents. To a buff card, for instance, are transferred the totals of all items on the customers' cards. This buff ticket, therefore, gives a comparative statement,

FIGURE 163: About the handiest tool the sales manager can have is a map, to help him visualize his territories. With every town and railroad in plain sight, great savings in traveling expense can often be made by rearranging routes on a basis of convenience rather than on arbitrary geographical divisions as they are so often made in offices.

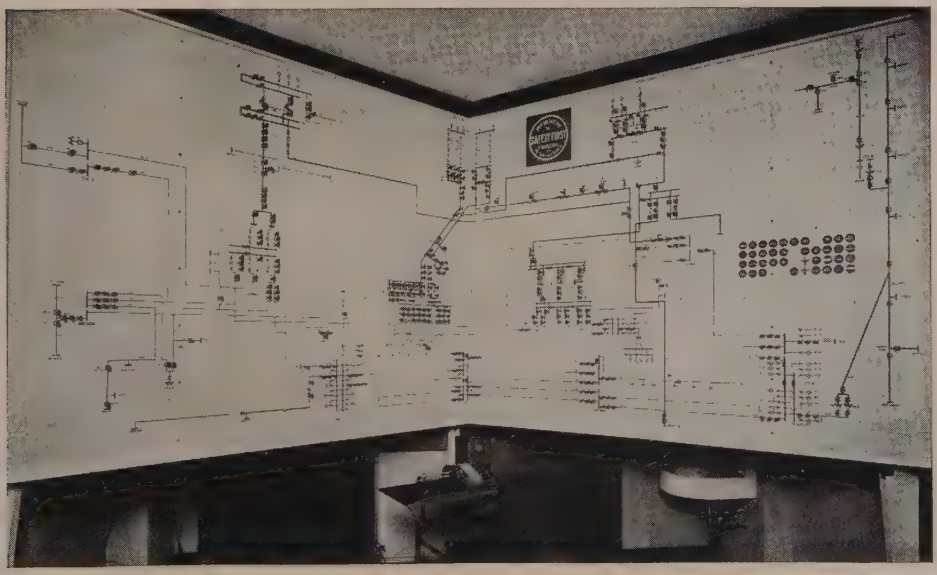


FIGURE 164: Perhaps this does not look like a map, but it is. The contract manager of an electric lighting company has it in his office to show him the arrangement of his electric cables. With this map he can tell what sections can carry a greater load and should be canvassed, and which sections are loaded to capacity and should be let alone.

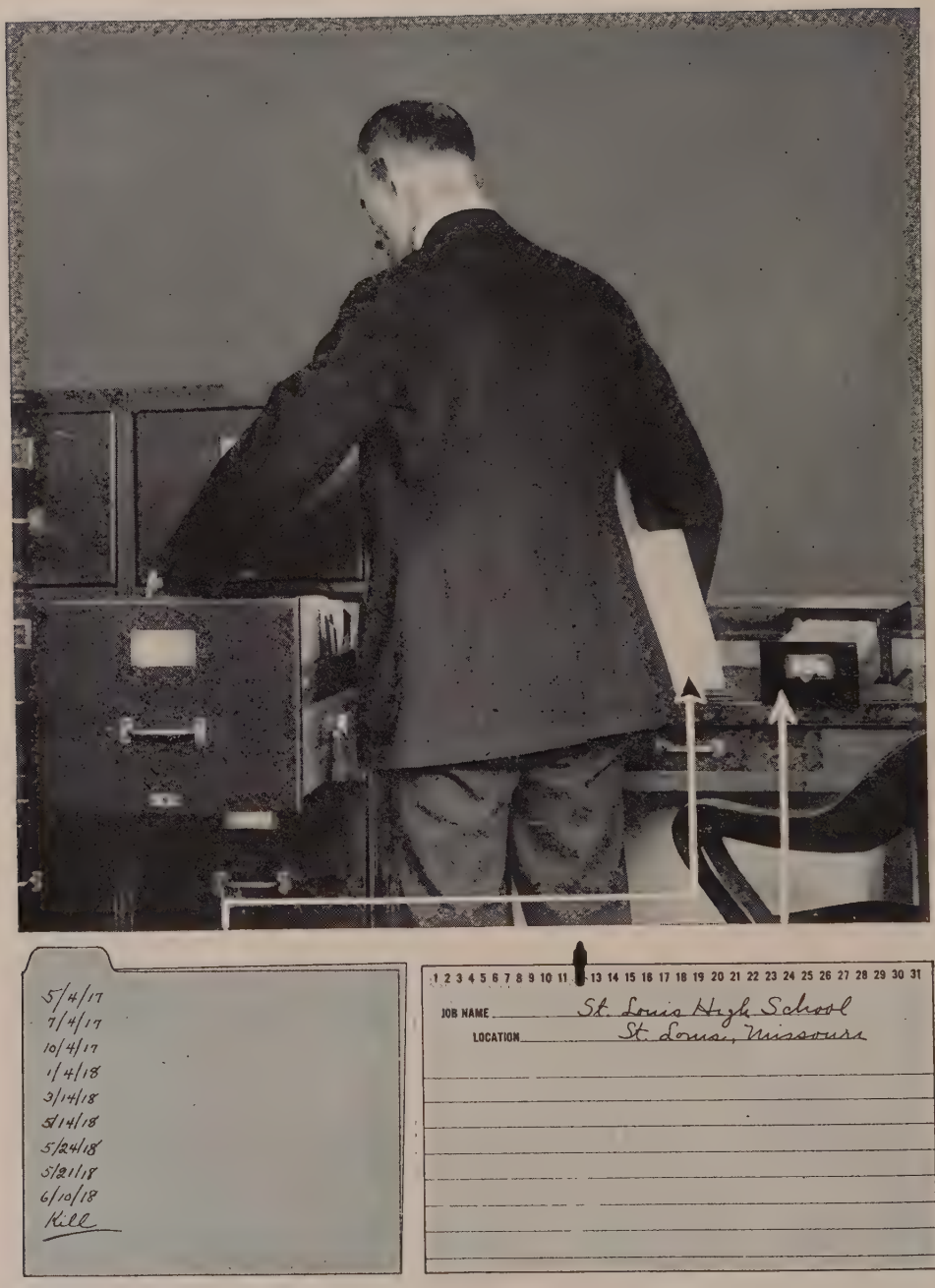



FIGURE 165: A folder and a card supply all the records this sales manager needs. The cards, one to each customer, are used principally as ticklers for the follow-up, although they can also carry information if desired. All correspondence is kept in the folder filed under the customer's name. A record of all mailings is kept on the corner of the folder.

**Machinery that helps keep the records**

of the total sales of each class of merchandise sold in the town or city comprising that division, as well as the total sales for all kinds of merchandise in that town. Reference to data is expedited, also, by having the towns for each sales territory arranged alphabetically. The control card for each territorial division, showing sales by classes and total sales, is of salmon color. All spaces at the top of these are left blank except that in which the salesman's name appears.

Blue cards placed in front of these various groups or divisions summarize the total business of all the salesmen throughout the state. Finally, a green card is placed at the front of the file and on this is recorded the entire sales of the company.

All original entries are made on the customer's white cards. An adding machine is used to total these figures for each town and get the summary for the buff cards. The totals of the buff tickets are added up to furnish the figures for the salesman's salmon-colored card, and each of these combined give in turn the total for the blue card, representing the entire business in the state. Lastly, the blue tickets are summarized for the one green card giving the entire sales of the company. By using a vertical file and an adding machine, the amount of work involved in making these totals is slight.

**Seeing is the best way of knowing, you'll agree**

The system enables the sales manager to take off comparative records quickly, and secure practically any kind of information desired. By running through the key cards, for instance, and collecting just the facts desired, towns, territories, or states may be compared for total sales or for sales on particular lines of goods. In planning a sales-building campaign, information of this kind, filed in shape for easy reference, is extremely valuable.

"In our company" says a sales manager, "we are fond of 'visualizing' everything. We used to have a vast map in the office—a regulation conventional map, geographically correct—upon which were colored tacks, each representing a live agency for our product. You have seen these, and you know they are always clotted in the East, while the spaces in the extreme West are sparsely flecked with a few lonely outposts. They always

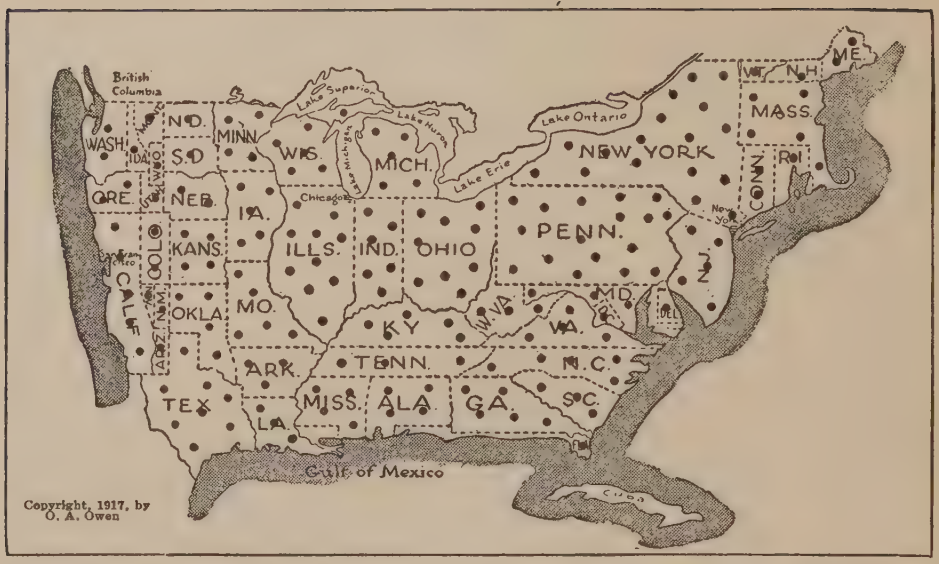



FIGURE 166: The states look badly out of proportion in this map, because their size has been determined by population instead of by area. Since one fair way to allot territories is on a basis of population this map shows at a glance how many states each man should have if he is to have an even break in getting business. It's a mighty big office selling help.

**SALESMEN'S WEEKLY EXPENSE REPORT WEEK ENDING** November 19 17

| Date | Breakfast | Dinner | Supper | Total Meals | Bed | Total | Railroad | Laundry | Bus | Miscellaneous | Miscellaneous | Total | Sales | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sunday | .35 | .75 | .60 | 1.70 | 2.00 | 3.70 | | | | | | 3.70 | | |
| Monday | .35 | .50 | .50 | 1.35 | 2.00 | 3.35 | 1.75 | | 25 | .65 | | 6.00 | $120 | 5% |
| Tuesday | | | | | | | | | | | | | | |
| Wednesday | | | | | | | | | | | | | | |
| Thursday | | | | | | | | | | | | | | |
| Friday | | | | | | | | | | | | | | |
| Saturday | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | |

Cash on hand $_____
Expenses for week_____
Balance on hand_____

FIGURE 167: This simple card easily holds one man's detailed expense account for a whole week together with his sales for each day, and also the total expense for the week. With these cards before him, it's easy for the office man to tell which salesman is the best investment for the concern. Cards are filed in a looseleaf binder, and kept close at hand.

look unbalanced, those maps! The disparity between populations East and West makes them so. Ours was like all the rest—so much so that the president accused me of having put all selling effort in the East to keep down traveling expenses and make a brilliant showing where the directors mainly lived.

**Where ordinary business maps fell down**

"'And you know,' he declaimed, 'an even national distribution is what we must have because our advertising is wholly in national magazines—and what's the use of advertising in the West when our agencies are scarce as hen's teeth there?'

"I told him our distribution rigidly followed the density of population both East and West. But the betacked chart on the wall, bristling with symbols of agencies in New England and the Empire State, so pitifully poor in them beyond the Mississippi, was too strong in ocular appeal. He persisted in his criticisms.

**—this one did the work**

"Luckily I had heard of a new map known as the 'control map,' and a copy of this was now before his eyes. It is shown in Figure 166.

"'What on earth have you there?' he asked. 'That is the strangest map I ever saw. You have got New York and Pennsylvania swelled up, Florida reduced to a button. The Great Lakes are hanging midway between the Atlantic and the Pacific instead of being far to the east, where they belong. As for the Far West it is squeezed up until a little more would eliminate Montana, Idaho, and the other states below them altogether.'

"'That map,' I replied, 'shows how our country would look if the size of the states corresponded to their population.'

"He bent over it with renewed interest.

"'Surely,' he protested, 'the states west of the Mississippi River are not so inconsiderable in population as this?'

"'Surely they are,' I returned, and showed him the last census report. He quickly verified the accuracy of the map not only for the far western states but for others that had stirred his disbelief.

**How to show the relative importance of territories**

"'Hum!' he mused, 'I never before realized the immense importance of New York, Pennsylvania, Ohio, Indiana, and Illinois. That belt comes near being half of the United States!'

**This rather peculiar map has a useful purpose**

"'You know,' I said, 'that we aim to have one strong agency in the center of every group of 500,000 people in this country? Now, each one of these big dots represents such an agency. We have, for example, seven agencies in Massachusetts and eight agencies in Texas. In Montana we have only one, while in New Jersey, as of course you know, we have five.

"'Bear in mind, please, that each state on this control map is shown, not in its true size, but in the relative size its population entitles it to. That is why Pennsylvania dwarfs scantily peopled Texas, and why other unnatural proportions appear. In other words, we have a map where, if the actual population was made visible by a dot for each human being, there would be an absolutely uniform gray tint produced over the whole by such dots. Is it not so?'

"He admitted that it was so."

"'Consequently,' I continued, 'when, as in this case, you see our agency-dots spread over the whole continent with perfect evenness, it is proved that our distribution facilities are impartially good for the nutmeg manufacturer in Connecticut, the cowboy in Texas, the congressman in the District of Columbia and the potato farmer in Maine.'

"The wonder about the 'control map' is that it was not devised long ago. It is a step in that science of 'graphs' that enables a burdened manager, with a good statistician at his side, to see at a glance the most complex trade matters. If a publisher of magazines wants to make sure his circulation bureau covers the whole continent without 'dead spots,' he has but to order a control map prepared. Uniformity of tint infallibly betokens uniformity of distribution, based on population. If, on the contrary, there are unduly light or dark spots, at those places the circulation man has underdone or overdone his work.

**How the controlling map helps locate branch offices**

"A manufacturer of a specialty succeeded in establishing small stocks, in care of trusty men, at San Francisco, Denver, Chicago, and Boston. These cities being about the same distance apart, geographically, he felt he was in position to fill orders promptly for the article, which was of a sort having strong popular demand. He soon

found that the Boston man was overworked, while the other agents, veritable gentlemen of leisure, handled less than half the total business among them. A control map was procured and the four cities located upon it. He saw his mistake at once. The Boston depot was serving half of the country. The other three were dividing the business of a thinly settled but geographically immense territory. This is a single instance that shows how the map can prove useful in a variety of ways."

**Why graphs often show conditions better than figures**

Graphic charts of other kinds have been found helpful in visualizing conditions in many other sales departments in concerns located all over the country.

In almost every case where comparisons are desired, they bring out the important points more vividly than mere figures can. They keep facts from losing themselves, Also, by showing tendencies at a glance, they save the time of wise business men who desire to make use of past performances when planning for the future.

**One sales manager's effective graphic chart**

The sales manager of a small company in the West has had great success with a graphic chart which keeps track of the results obtained by his salesmen. The cost of keeping the graphic records is moderate. The information they supply is valuable for comparative purposes. This method is suggestive and probably could be used profitably by many other managers desiring a comparative record of the effectiveness of their men.

As a part of his office equipment this sales manager uses a flat-top desk six feet long, the top being entirely covered by a piece of plate glass. The comparative chart is kept under this glass.

A six-foot length of millimeter paper takes care of the records of twenty-seven salesmen. This sales manager finds that his needs are best served by having the chart arranged for a monthly record. If desired, the comparisons could be made weekly, or for any other period —the only consideration is that the longer the period, the longer must be the paper, in order to display the same number of comparisons.

**How it is laid out**

In the column headed "number," a scale is printed which starts at zero and works upward, by even steps, to somewhat more than the maximum number of calls possible per day.

**Fitting the chart to the job**

In the column headed "dollars," a scale starts at zero and works upward to a point about 50% higher than the average sales of each man for a month.

In the column at the foot of the page marked "average cost," a scale starts at zero and works up to a point higher than the maximum cost per call.

The figures in these scale columns depend, of course, upon the nature and quantity of business obtained, and are not shown here because they would not apply in other lines in precisely the same way, although it is easy enough to fit them to any business.

The framework of the chart is drawn once each year. It shows graphically seven facts about every salesman. In the upper portion, the following items appear:

1. Number of orders obtained: black line
2. Value of orders obtained: black dotted line
3. Number of calls made: green line
4. Average value per order: green dotted line.

On the lower portion of the sheet, these facts are shown:

1. Average cost per order (salary, commission, and expenses) black line
2. Average cost per call: black dotted line
3. Average cost per $100 of orders: green line.

**Getting the data for the graphs**

The time required to plot and draw these seven points on the one chart to show the records of twenty-seven salesmen is less than four hours a month.

To secure the information which goes on the sheet, each salesman is provided with a supply of postcards. He fills out one of these every day and mails it to the office. On it, in the convenient spaces it provides, he shows the number of calls he made during the day, the number of orders he obtained and the value of them.

When the cards are received at the office, the information each carries is transferred to the salesman's individual summary and at the end of each month the figures on this form are totaled and the averages figured.

The whole routine in connection with this plan does not represent more than two days' work per month for a clerk. So it is obvious that a similar plan can be installed and operated at a low cost by any manager.

## CHAPTER XXI

# CHECKING UP ON THE ADVERTISING

**How one advertising department was organized**

HERE, told in his own words, is the story of a man who was given charge of a badly disorganized advertising department and organized it in short order. He gives organization and records the credit for cutting the cost of the department to 1.6% of the sales instead of 2% as it had been. Of course your business may not be large enough to warrant a separate department to handle advertising. You may have to attend to it yourself. All the more reason then to try these methods, which have been proved. There should be no reason why, with quite obvious changes, they cannot be adapted to the needs of any business which advertises.

"Let us consider the real advertising department as it was finally organized," begins this man. "Keep in mind the fact that we had to organize as we went, and produce a tremendous volume at the same time. We made plenty of false moves—we were human—but we started out with some pretty definite principles. And because they worked, I make bold to tell you that they will work in your department—whether it is small or big.

"These fundamental principles which we discovered and laid down are about as follows:

1. Definite written orders on each transaction
2. Permanent records, properly grouped
3. Division of labor (at least division of functions)
4. Written standard practice instruction covering routine procedure
5. Capable understudies
6. Periodical analysis and report
7. Satisfactory reward for the individual.

**First, we will consider the mechanical aids**

"Keep them in mind and we'll come back to them later. You practice them to some extent or you aren't making the most of your job. Now let's consider the machinery, starting with written orders and permanent records.

**These records are simple but effective**

"Take first the educational publicity work, or what you might call the service section of the department. We had a 'special service instruction sheet.' It told the power-farming expert, or whoever did the work, how to write an article for a given publication; to go somewhere and give a lecture; to edit the house organ that month, or to go about any other job.

"These sheets were numbered. One copy went into a numerical binder in my desk; one into a 'special service job envelop' in the record clerk's file; one to the workman. When he finished the job he made his report, noted the time and expense on his sheet, and turned it in to me with all collateral material. Eventually it all went into the record clerk's envelop. We had the basis for an accurate billing on work done for other departments. We had a continuous record of work in progress. And we had a permanent history for future reference.

"Then there was an order sheet for each display advertisement, numbered and filed in the same way. It showed the advertisement number; the closing and publication dates; the territory and products affected; the campaign of which the advertisement was a part; the size of the advertisement; publications to be used; the producer (agency or department copy man); a slant on the copy and illustration; and the shipping date.

"We used nearly 1,000 separate advertising orders the first year. Two thirds of them—for trade paper advertisements, mostly—were filed in our own copy section—the rest by the agency. But on every one of them we had a complete record of the time, the place, and the purpose. Our advertisement envelop held the typewritten copy and proofs of the finished advertisement. The face of the envelop showed the costs. We didn't try to remember, nor guess, nor even suspect—we knew.

**Specifications were drawn for all purchases**

"Again, there was a job order for each piece of advertising literature. When a sales promotion manager came in and asked for a piece of literature, or a souvenir, or some display material, we made him sit down and think it out with us. We set down rough specifications as to size, cost, postage, quantity, distribution, product, copy, and illustration plan, and got his O. K. Then we could work intelligently and to good results.

"The record clerk supplied the job and form numbers. The copy man's duplicate was pasted in a folder, or a jacket. He kept all his material in the jacket instead of lying around loose. When he wasn't working on the job the jacket was supposed to be in the job envelop. And while the job was progressing the record clerk's envelop was accumulating purchase orders, correspondence, and the like, for a complete, permanent record.

**Did you ever know an instance where red tape made for speed?**

"The copy man working on an advertisement or catalog had to make a written requisition for the library or illustrative material he wanted. Red tape? Surely! But with as high as 100 advertisements and job orders out at once we had to know where was what, and the boys soon saw the point. When they didn't see it we had a heart-to-heart talk.

"We locked up six finished copies of each job as we got through, and only the legal department could draw on this reserve. Just another bit of caution that might save a trademark now and then, besides making it easier for succeeding generations of copy men to get along on the job without too many lawsuits.

**Figures that show exact costs**

"There was a circulation work order for each job of direct mailing, covering the material to be used; list circularized; details of matching, signing, sealing, and postage, and finally the report of time and costs to be filled out by the circulation forewoman and the record clerk.

"Each girl in this section, by the way, made out a daily time sheet. This gave us exact cost records on jobs and efficiency records on the girls. More red tape, perhaps, but in 18 months we graduated 19 girls to better jobs downstairs as a result of our telltale figures.

"There was an order blank for duplicating work, and the operator kept an envelop on each job. As a result, we made a nice profit out of other departments. We soon found out just where we could beat the printer and where we couldn't, and we choose our work accordingly.

**One place where rigid specifications are particularly valuable**

"There were, of course, purchase and shipping orders. We issued definite specifications to printers—one form for literature, and one for stationery and forms. Naturally we had written stock room records. Verbal orders didn't go, anywhere around the place.

**How 20 special forms were done away with**

"We got rid of buying the stationery and storing it, but first we corralled the compiling of it, including forms, of course. We cut out about 20 special letterheads. We standardized dozens of ledger forms involving special non-stock binder sizes and unnecessary waste in cutting expensive stock. We eliminated dozens of unnecessary shades of color and kinds of stock, and enabled the local printers to lay in good reserves of standard papers with some assurance that they would be used. And we got much quicker delivery.

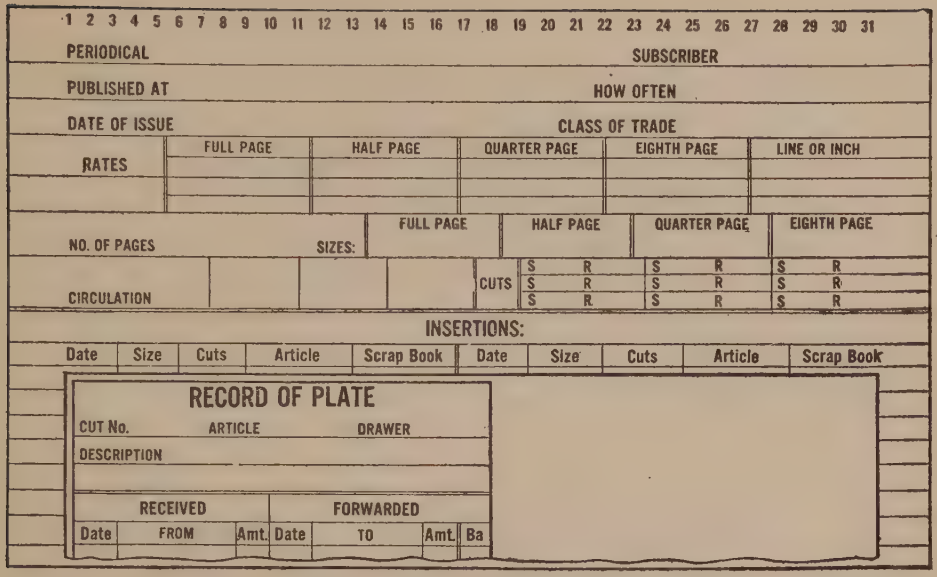
"We did all this by using a dummy specification sheet, made out in conference with the department head requesting the form. We got him to say 'yellow' and 'about so big,' and to leave the rest to us. Then we issued a regular specification sheet calling for a standard size, weight, and color. The purchasing department did the rest, all but keeping the inevitable envelop.

"Don't get the idea that all these orders and records were installed the day after New Year's. Every kink in the system grew out of some hair-raising muddle and was adopted in self-defense. Every time a row occurred that could be traced to a weakness in the system, we got the evidence together, consulted everybody involved, worked out a routine and forms, and set down in writing just how the thing should be handled afterward.

**A standard practice book that prevents "I didn't know"**

"Thus developed our standard practice book. You may call it a rule book, a law book, a bible, a book of routines, a manual, or what not, but if you can run an advertising job without written standard practice instructions of some sort you can begin Monday morning to make yourself a better manager by writing it all down. Make every man, woman, or office boy that has individual responsibility write down just what he does and just how he does it. Take these essays, edit them, see how they dovetail—or don't dovetail—then, with this picture before you, face the fact that your main grief is probably your own fault and not the fault of subordinates who are working at cross purposes at your direction.

"There is no detail of operation too small for your earnest attention—once. You can profitably spend a half day, if necessary, in consultation with a $6 office boy as to the best way for that boy to handle the details of



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

PERIODICAL — SUBSCRIBER

PUBLISHED AT — HOW OFTEN

DATE OF ISSUE — CLASS OF TRADE

| RATES | FULL PAGE | HALF PAGE | QUARTER PAGE | EIGHTH PAGE | LINE OR INCH |
|---|---|---|---|---|---|
| | | | | | |

| NO. OF PAGES | SIZES: | FULL PAGE | HALF PAGE | QUARTER PAGE | EIGHTH PAGE |
|---|---|---|---|---|---|
| CIRCULATION | | | CUTS | S R | S R | S R |
| | | | | S R | S R | S R |

INSERTIONS:

| Date | Size | Cuts | Article | Scrap Book | Date | Size | Cuts | Article | Scrap Book |
|---|---|---|---|---|---|---|---|---|---|

RECORD OF PLATE

CUT No. ARTICLE DRAWER

DESCRIPTION

| RECEIVED | | | FORWARDED | | | |
|---|---|---|---|---|---|---|
| Date | FROM | Amt. | Date | TO | Amt. | Ba |

FIGURE 168: These two forms are all the records used by an advertising man to watch his magazine advertisements. The larger one provides space for all the information needed about the magazine. The other form keeps track of cuts. The cut itself is pasted on the card at the right, and the information is noted at the left—a mighty handy form.

ADVERTISING LITERATURE — FALL 1918

| TY | 202 CUST. | PROS. | Cat 1/1 | Cat 1/2 | Rubber cut | Big Bill Shot | Cat 1/3 | SBM 1/1 |
|---|---|---|---|---|---|---|---|---|
| 1 | 246 | 78 | 9/1 | 9/16 | 9/20 | | | 10/1 |
| 2 | 222 | 101 | 9/1 | 9/16 | 9/20 | | | 10/1 |
| 3 | 179 | 34 | 9/1 | | 9/20 | | | 10/1 |
| 4 | 259 | 60 | 9/1 | 9/16 | 9/20 | | | 10/1 |
| 5 | 158 | 72 | 9/1 | 9/16 | 9/20 | | | 10/1 |
| 6 | 240 | 26 | 9/1 | 9/16 | 9/20 | | | 10/1 |
| 7 | 206 | 12 | 9/1 | | 9/20 | | | 10/1 |
| 35 | 213 | 36 | 9/5 | | | 9/21 | | 10/1 |
| 36 | 210 | 40 | 9/5 | | | 9/21 | | 10/1 |
| 37 | 220 | 47 | 9/5 | | | 9/21 | | 10/1 |
| 38 | 209 | 27 | 9/5 | | | 9/21 | | 10/1 |

FIGURE 169: It often pays to keep pretty close tab on what "literature" has been sent to customers and prospects and when it was sent. That's what this simple card does. The column headings are left blank so that they may be filled in to suit the needs of the office as they come up. There is hardly any limit to the way this helpful form can be used.

**One decision for 100 cases**

his job. But after you've reached an agreement, and considered the boy's functions in relation to the advertising department, and to all other departments, you are criminally negligent if you don't write it down where it can't get away.

"Reduce that boy's job to writing and file it as a law that will give him supreme authority to run himself without direction and without interference. If you don't, you're not doing your utmost to make responsible men out of those under you. And you're not so good an executive as you might be.

"One careful decision as to procedure can often be made to apply to a hundred cases. Make your decision with the consent of the governed, then make all hands stick to the letter of the law until you find a better way.

**How the standard practice book is made**

"The funny thing is that if you do insist on standard practice a staff soon gets to like it. It restricts action, of course—that is, action on hunches. But it also gives each individual absolute freedom of action within the limits of his job. It separates functions, makes decisions in advance, and greases the machinery until an organization becomes practically self-managing.

"As each procedure was adopted and written up, three copies were made. One was posted for three days on the bulletin board. One went into my book. The third was routed, and after each individual concerned had initialed it, this copy went into a master book kept by the record clerk. The bulletin board copy went into a third book, which was always at the disposal of the staff. When a man got off the track we had him—he couldn't plead ignorance of the law.

"Changes and corrections went through the same routine. Orders and general policy information from downstairs went into the book as issued. If they conflicted with our standard practice we raised the issue at once; and I can say we got those conflicting orders changed more times than we changed ours.

**New workers find it valuable**

"Our department grew very fast. The book was a godsend when it came to breaking in new people. A new man's first job was to study the book for at least three days. Then he was ready to go to work without bothering busy people with a lot of questions.

"But perhaps the most satisfying use of the standard practice book was in keeping other departments on the track. In nearly any company you are bound to have clashes between departments. We could always show that our people were not running wild. And after bumping into our book for a few months the two departments that gave us the most grief—sales and purchasing—started books of their own.

**How the standard practice book checks other departments**

"One more illustration and I'm done with this topic. After 16 months of organization and production I was ready for a vacation. We hired an assistant manager—a good man. He came on a Saturday. I gave him the standard practice book, the organization chart, and a few notes on matters pending, and left the next day.

"I was gone 10 weeks. While I was gone the management of the company was changed overnight. Drastic retrenchment was the order. Thousands of employees were dropped. I was in Switzerland when I heard about it. I knew my assistant had a definite job, whether I had or not, and I had no choice but to leave him alone. When I got back, a month later or so, I found the department running sweetly along, somewhat worried, but practically intact, and I had hardly been missed.

"The standard practice book saved my job. It saved jobs for the people in my department. And I say to you that if you can get your department, big or little, to build a standard practice book, you and they can weather almost any storm that ordinary business may develop.

"We placed new stairs to land people in the secretary's room. Traffic just naturally had to gravitate to and from this as a center. It was the easiest thing in the world for an intelligent secretary to keep her finger on the routine while I stayed in my dugout and worked.

**—and sometimes prevents serious difficulty**

"It took us nearly a year to get to a point where we felt really settled and could begin to refine our methods in detail. We had taken six departments, which reported to the general manager, and welded them into one; established definite written routines; charted the organization according to functions, and placed the different sections in their logical places.

"So now we may leave the general story of organization and take up a few of the everyday details.

**Saving the executive's time**

**Preventing interruptions**

"I was personally responsible to the general manager for expenditures and policy. Our work was not censored in advance, but it had to fit. We had to know what was going on. We had to be up to the minute on the plans and acts of the general management, the sales department, the factories, and the experimental corps.

"That meant frequent conferences with department heads, but we also had an intelligence service, a regular spy system. That meant our being real friends with the local foremen, the local salesmen, men in the drafting rooms, clerks in the sales and traffic departments, the general manager's private secretary, and every man from outlying factories or branches we could get hold of.

"Every man in the department was constantly on the lookout. The staff prided itself on being the information center, and to its members the "dope" was freely given. Every clew was run down and every bit of information went into a morgue for instant reference. So our campaigns did fit, and we seldom had to make awkward explanations after the fact.

"The secretary's staff had a definite job, which was to leave me alone as much as possible. They shunted callers. They sorted and distributed mail, looked up previous correspondence and answered most of my letters before I had the pleasure of seeing them. They sifted trouble cases and got all the facts before bringing me the grief.

**How information is made available to all workers**

"They discouraged the practice of each employee's running in to see the boss every few minutes on some trivial question that a little thought would answer. Department people were taught to collect the things they couldn't answer and bring up a number of them at one time. In short, the secretary managed to leave me alone a great deal of the time for concentrated work. The department got so it didn't care much whether I was in town or not. It ran beautifully as long as I let it alone.

"We had a little confidential matter in the executive files. But everything else about the place was free as air and almost as easy of access. So I had no monopoly on information and didn't have to spend my time in dispensing it.

"I kept one folder handy, labeled 'Vanity and Ammunition.' It held certain bouquets passed to us and sundry

other bits of evidence that common sense told me might happen to be useful in emergencies. I never went 'on the carpet' without it.

**The value of an annual report**

"You can well afford personally to write a comprehensive annual report. Your concern may not ask for it. It may not be read. But it checks you up in your own eyes and establishes a milestone to tell you whether you are going ahead or back. I have done it for years and it is a liberal education to me to read my old reports. It keeps me from being impatient now with fellows who know a lot more than I did at their present ages.

**What should it cover?**

"In this particular case my reports were divided as follows:

1. Status of organization, including personnel, salaries, and recommendations
2. Statement of policy governing the year's work, quoted from a previous statement, and comparison with the year's activities
3. An account of the year's work of each section
4. Statement of output and costs compared with the budget
5. Resume of continued and uncompleted work
6. Recommendations as to policy for the coming year
7. Estimate of appropriation required to carry out this policy.

"My file of annual reports would be my main solicitation if I were trying to sell myself to a new firm. As each report was written, I was so close to the details that I had to tell the truth. I couldn't dress it up and leave out the unpleasant details. Report fully to yourself at least once a year. It's good for whatever may ail you.

**A record clerk is found valuable**

"The record clerk was a party to every transaction. Nothing could get by her. The machinery wouldn't work without her. Her records on jobs—advertisements, literature, special service, mailings, and the like—were based largely upon 9 by 12 envelops, open at the top, with no flap.

"Four different envelop forms were used, printed front and back to accommodate her summary of costs. These envelops seldom left the files except when reports were being made up, or a new job of similar character was being laid out. Each envelop took the place of three to five previous card indexes and made it a simple matter to analyze our work.

**What the records cost**

"We kept an expenditure book and analyzed our own expenditures. All invoices came first to the record clerk for checking against purchase orders and estimates. Invoices were entered on the proper envelop, also in a book with parallel columns which distributed expenditures as they were posted.

"We made a monthly report based on invoices passed, which gave a more satisfactory comparison with the appropriation than the controller's record of bills paid. Our annual report classified expenditures by products, by territories, by class of material produced, and by sections of the department. Display advertising reports showed the cost of space, commissions, cash discounts, art and plates. Reports on literature showed the quantities, and the distribution, as well as printing, art, and engraving costs.

"We voluntarily went so far as to furnish the treasurer each month with a statement of his probable payments on our account for the next period. Shortly after the management was changed, we outlined our absolute needs for six months in advance, and were within 2% of being dead right. So they let us alone some more. Our figures earned us the privilege.

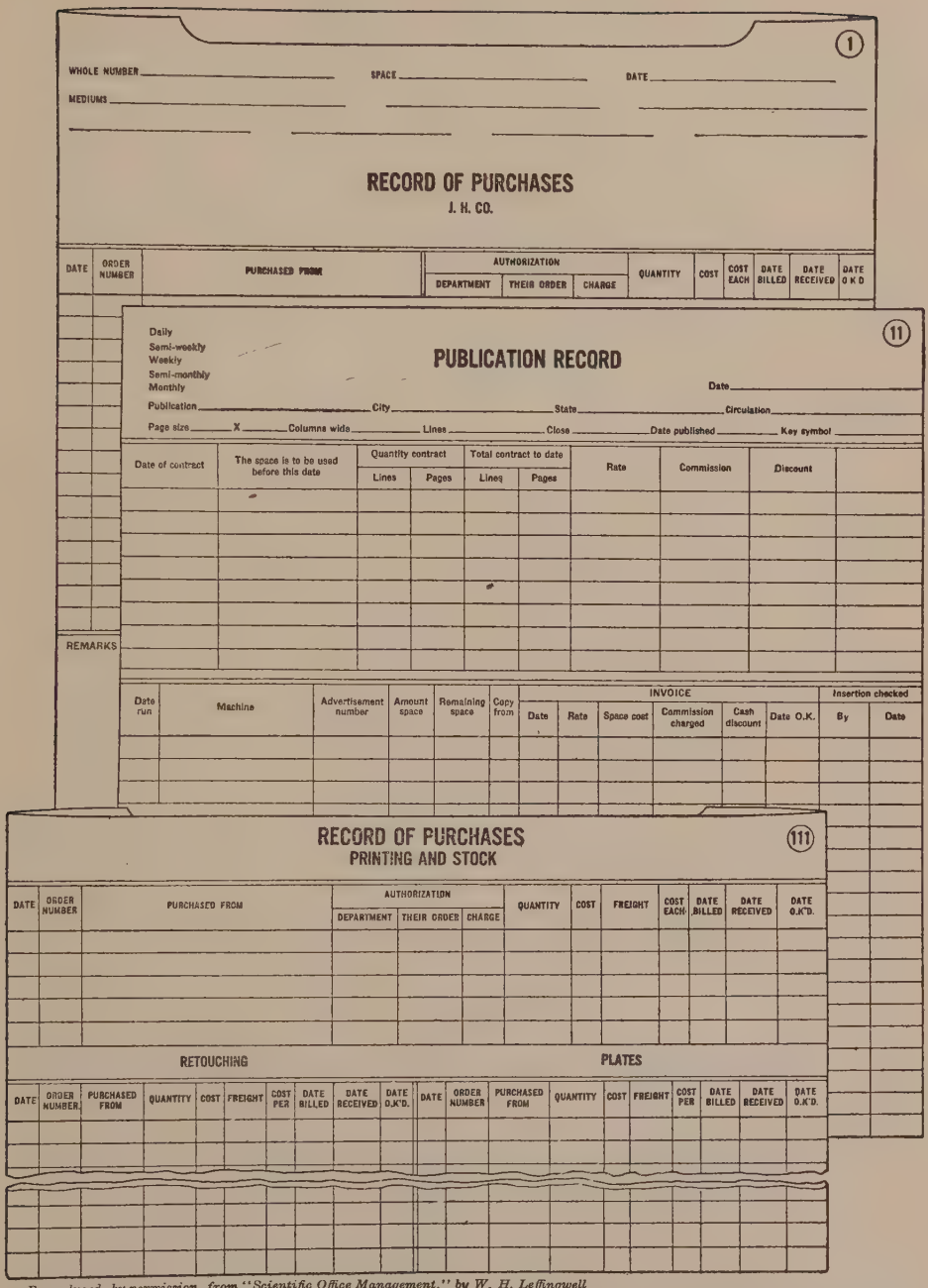
"Six girls, averaging $44 a month, made up this record section. They handled all job records; checking and clipping; rate and correspondence files; files of drawings and engravings; stock records; purchases, invoices and accounts; and did considerable stenographic work besides. This section saved its cost and paid dividends for us every month in the year.

**How the "morgue" is used**

"Three other devices handled by this section are worth noting. One was a 'future job' envelop, similar in size to the original, but of different color. This was filed right behind the original. We put all kicks and criticisms on a job in the 'future job' envelop—they served us as suggestions and data for the next edition. It discounted memory, and gave the copy man a flying start in the right direction the next time.

"The second was a system of permanent looseleaf binders—big ones—each devoted to one product in all its sizes and models. This was our 'morgue.'

"Each binder covered in part:



WHOLE NUMBER _____ SPACE _____ DATE _____

MEDIUMS _____

1

**RECORD OF PURCHASES**

J. H. CO.

| DATE | ORDER NUMBER | PURCHASED FROM | AUTHORIZATION: DEPARTMENT | AUTHORIZATION: THEIR ORDER | AUTHORIZATION: CHARGE | QUANTITY | COST | COST EACH | DATE BILLED | DATE RECEIVED | DATE O K D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |

Daily
Semi-weekly
Weekly
Semi-monthly
Monthly

11

**PUBLICATION RECORD**

Date _____

Publication _____ City _____ State _____ Circulation _____

Page size _____ X _____ Columns wide _____ Lines _____ Close _____ Date published _____ Key symbol _____

| Date of contract | The space is to be used before this date | Quantity contract: Lines | Quantity contract: Pages | Total contract to date: Lines | Total contract to date: Pages | Rate | Commission | Discount | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

REMARKS

| Date run | Machine | Advertisement number | Amount space | Remaining space | Copy from | INVOICE: Date | INVOICE: Rate | INVOICE: Space cost | INVOICE: Commission charged | INVOICE: Cash discount | INVOICE: Date O.K. | Insertion checked: By | Insertion checked: Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |

**RECORD OF PURCHASES**
**PRINTING AND STOCK**

111

| DATE | ORDER NUMBER | PURCHASED FROM | AUTHORIZATION: DEPARTMENT | AUTHORIZATION: THEIR ORDER | AUTHORIZATION: CHARGE | QUANTITY | COST | FREIGHT | COST EACH | DATE BILLED | DATE RECEIVED | DATE O.K'D. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |

**RETOUCHING**

| DATE | ORDER NUMBER | PURCHASED FROM | QUANTITY | COST | FREIGHT | COST PER | DATE BILLED | DATE RECEIVED | DATE O.K'D. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

**PLATES**

| DATE | ORDER NUMBER | PURCHASED FROM | QUANTITY | COST | FREIGHT | COST PER | DATE BILLED | DATE RECEIVED | DATE O.K'D. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 170: Many records in every branch of office work can well be kept in and on specially printed folders, it is found. When the original papers can be kept, this is especially effective as it obviates copying the information on cards. That's the way these three records are kept by the man in charge of advertising in one get-ahead eastern office.

**What is kept in the looseleaf binders?**

1. Product's excuse for existence; that is, the views of the inventor, builder, salesman and others
2. Sizes, variations and accessories
3. Territory or markets to which adapted, and the most favorable thereof
4. Field performance; that is, testimonials and records of tests
5. Costs, prices, competitive prices, terms and discounts
6. Weights, shipping data.

"In short, we collected all the 'inside' information that would give a new man a clear perspective before he began to write, as well as information up to the minute. It is a fact that our best catatog man was with us a year before he ever saw a threshing outfit at work. But by that time his 'vanity file'—he kept one, too—was full of bouquets from the sales force.

"The third device was an 8½ by 11 card that superseded five card indexes on illustrative material. We had the Dewey decimal system in our library, so we applied it to our drawing and engraving files, too. The copy man found his dope in the library and then went for his pictures under the same index number, or vice versa.

"Our card recorded purchases, inventory, and filing and shipping data. It took care, not only of one drawing from a subject, but of all drawings, negatives, lantern slides, prints, engravings and electros from that subject, in whatever form or size. When a man found the picture he wanted, he had before him a record of every reproduction that had been made of it and where that particular reproduction was—whether we had it ourselves, or whether it was in the hands of a printer, engraver, or publication.

**How this same system was adapted to a much smaller office**

"All this work of the record section may seem out of the question in a small department. But in a later connection I got it all done—substantially—but on a smaller scale, with one $40 girl. The functions of such a section are the same, regardless of size."

Another advertising man has devised a system which, while extremely simple, yet keeps him in effective touch at all times with matters that he might otherwise lose sight of in the press of work. These records have proved exceptionally valuable and it would seem that they could be used with equal success by other advertisers.

**The tested records of another advertising man**

The two forms shown in Figure 168 are the only ones used. A record is kept of the different publications in which the concern advertises, together with copies of the advertisements carried in each.

On the front and reverse sides of the top card there is space for a complete record of 50 insertions in the publication which the card represents. At the top, all general information is given—the name of the periodical, whether it is subscribed for, the date of issue and the class of trade it reaches. There is also space in which to note the date when the advertising forms close. The fourth line takes care of the rates for at least three years. In the space above and below, room is provided for the class of rates, either per term or period, and the terms and discounts which are regularly allowed by the publishers.

**Keeping track of all advertisements**

On the fifth line there is a record of the size of the magazine and its advertising forms, and the first part of the sixth line shows the circulation for three or more years. The balance of the sixth line makes provision for a record of the dates when cuts were sent and returned. This record must agree with the inventory shown in the insert in Figure 168.

There follows the record of insertions, and plenty of space is left to write in any information that may be needed for reference. The number of cuts used in each advertisement, and their catalog numbers are noted in the proper column. In many instances the article advertised indicates the kind of cut used and it is therefore unnecessary to make further reference to it.

**How the advertisements are followed up**

Along the top of the card are date numbers, used to carry signal ticklers. These signals automatically bring the card up for completion of record at the proper time.

For example, suppose copy is to be inserted in a paper published on the fifteenth of the month. Under "insertions" in the date column is written the date, amount of copy, the cuts used, and the article advertised. The copy is sent, and the tickler signal is moved forward—to show that the card is to come up on the twentieth. By that date a copy of the periodical should have been received. If so, the advertisement is pasted in the scrap book, and recorded on the card. Then the signal is removed, showing that the current record is complete.

**The filing system used**

This method is also used for sending new copy. Suppose, for example, an advertisement is run in the March issue of a magazine and the season is over till the fall. A signal is then placed to bring the card up in the fall for the desired month. The reason it is brought up at that time is indicated in lead pencil on the card. This man uses signals of different colors, one color for each month, and therefore knows at all times just what he wants to do at any time of the year in his advertising. Matters which might evade his notice until the last moment, or escape attention altogether, are brought up in regular order.

The same size of card is used for the cut record. The printed matter comprises only the left half of the card. At the right is pasted a proof of the plate. At all times this card tells just how many cuts of any one article are on hand, and also where any are that have been sent out.

In filing these records, insertion cards are all arranged alphabetically. Cut record cards, however, are arranged first by subjects and then alphabetically under each subject. This makes it possible, in running an advertisement of any article, to pick out quickly the illustration that will fit in best under the circumstances.

Simplicity and efficiency are the points aimed at in this system. The test of a year's successful service has proved its thorough value. Anyone in the office can take up work where another has left it, for there is at all times a complete and perfectly simple record of just what has already been done.

**How to take care of cuts and photographs**

The advertising man for an Ohio manufacturer uses a system of his own design for filing cuts, drawings, and photographs. His primary object is to find these quickly and with the least amount of work. To have the fewest materials and the smallest possible number of clerks is the second aim.

The system is based on the obvious fact that when there is only one place to look for a thing, it can be found in that place. Everything is systematized, handled to and from the files and indexed in the same way. Each index is related to every other by one basic principle. The system, indeed, is so thoroughly simple that it does

not even require all the time of one clerk to keep it up.

**This index to all cuts**

This company manufactures cranes, drill presses, grab buckets, and hoists, as well as its own brakes, controllers, and motors. When the present incumbent took charge of the advertising department, 600 cuts were stored in boxes in the basement. The ones in current use were in an old cupboard in the office. Photographic negatives were stored in three different places and only a few were actually being used.

His first step in reorganizing the files was to have a print made of every negative on hand. These prints were mounted on cloth and the number and name of each was typewritten on the back. They were then bound in canvas binders. In all there were about one thousand 8 by 10-inch prints.

The data on the back of the prints was then transferred to file cards. Installation views were marked I and shop views S. This gave a card for every picture in the binder, classified according to the types of apparatus.

The cards were arranged alphabetically so that the names of customers and miscellaneous prints of one group fell into their proper place in the alphabet. The group names were then typewritten on correspondence-size sheets of copy paper. All brakes were on one sheet, controllers were on another, cranes type A on another, and so on. Wherever necessary, subjects were cross-indexed. Thus, hoists type U formed one sheet, and all parts, such as brakes, controllers, and motors were on this sheet.

**—works like a dictionary**

Three carbon copies of these sheets were punched and bound in stiff manila covers. One book went to the sales manager, one to his assistant, one to the estimating department, and one the advertising man retained. The cards were then destroyed, for they were no longer needed.

There is now just one place to look for a picture—in the typewritten index. The binder which contains the actual prints is used only when there is doubt about some detail in a picture.

This volume is easily handled and is as precise as a dictionary. The list of pictures showing a complete group of one type of apparatus can be seen at a single glance, and every picture in that group is on one or two

**How the index is kept up to date**

sheets. When new prints are added in the binders, notation of the fact is made in pencil in the index. When an index sheet is full it is copied and the new copy replaces the old one.

The same precise system is applied throughout the rest of the department. All negatives, for instance, are filed numerically by the photographic department, the same numbers being used as on the prints. Retouched photographs, also, are filed numerically in a drawer, the numbers here corresponding to the numbers on the negatives and prints. A small stock of current prints is kept in a transfer case, and these also are filed numerically by the same system. Whenever one of these is wanted by any department, it is simply referred to by its print number and it can easily be picked from the current drawer. If it is not there, it is ordered from the photographic department, where the photographer simply gets out the negative called for and prints it.

All cuts are stamped with the initial number of the photographs from which they were made, different sizes being followed by a letter. Where electros have been made from the cuts this fact is indicated by preceding the number with the letter E. These cuts are filed in 6 by 9-inch cardboard boxes, which are type high, and hold several small cuts or a single 6 by 9-inch cut. Oversizes are kept in a special cabinet. Boxes are numbered consecutively and are piled five high in a case holding one thousand boxes. Zincs, wood cuts, and designs are numbered separately and preceded by their respective initials.

**Why accurate records are essential**

A proof of each cut is drawn and mounted on an 8 by 11-inch manila sheet. These sheets are bound in a canvas post binder similar to the binders used for photographs. Each sheet has the same number as the cut. If several cuts of different sizes have been made from a single original, all of them are mounted on one sheet.

These binders, again, are indexed like the binders containing photographs—on typewritten sheets—and the sheets are bound together. Unlike the photographs, however, it was necessary here to have in addition a numerical card index. One card is made out for each halftone, zinc, wood cut, and electro. These cards

contain a careful description of the cut, its number, and the number of the box where it is kept. For instance, the designation for the electro of cut number 74A would be E742A-700. This locates at once the electro, the box, the retouched photograph, the print in the binder, the proof and the original negative.

**A simple card index**

This card index is used only to keep track of cuts that are sent away. When there is a call for any cut, for example, its card is withdrawn, entered up with the removal date and the name of the recipient, and is placed in the tickler. When it is returned, the card is again dated and returned to its place in the file. This is the only purpose served by the file.

**How catalogs are produced**

If the advertising man decides to get out a catalog on the type U hoist, it is only necessary to take the photograph index and select all the pictures that are to go into the catalog. If some of the features of the hoist are not shown, a new picture must be taken. Then he takes the cut index and check off the cuts that have already been made. Those that have not been made are ordered. These are duly indexed and proofs entered, and the record is complete.

The entire system is so simple because there is always just one place to look for a thing. All information needed is condensed into a small 8½ by 11-inch book which can be tucked away in a desk drawer at night.

**A code system for keeping track of cuts**

It is easy to lose track of cuts, if they are not carefully labeled the minute they come from the engraver's. A western advertiser classifies cuts by letter, according to where they are to be used. T, for example, stands for trademark, C for catalog, CR for crusher, and so on. Each new cut is given the next unused number in the class to which it belongs. Thus, if there are already twenty-one trademark cuts, and a new one is received, its number is T-22.

Trouble was experienced at first in obtaining a permanent number, one that would endure the printer's handling and not be obliterated by the stain of printers' ink. This difficulty has been overcome by using a blue pencil and coating the letters generously with shellac. When dry the shellac is transparent, will not come off and will not stain.

**A simple system for the mail advertising office**

The proof of the cut is numbered in the same way as the cut itself and filed alphabetically according to subject. A 4 by 6-inch file card is also numbered to correspond with the cut and filed alphabetically according to letter. If there are two or more cuts alike this fact is indicated. When a cut is sent out, columns showing "where sent" and "date" are filled in on the card. When returned another column is checked and the date shown.

Each cut is wrapped in a separate package numbered exactly as the cut inside. Tracing any cut, therefore, is easy. Reference to the proof shows its number and the card index gives its location.

In another smaller office this system is in use to keep track of cuts. Each time a cut is sent out of the house a rough impression of it is made on a small piece of paper. The date and the name of the printer to whom it was sent are added. All that is necessary to do this is a regular ink pad such as is used for rubber stamps. These slips are kept on an ordinary spindle file.

When the cut is returned, the record is destroyed. Thus it is possible to tell at a glance what cuts are out and who has them.

"I can locate in not much over sixty seconds a real authority on nearly anything I need to know," says another advertising man. "You could not buy my data book and collection of information for a cent under five figures.

**A single note book holds the records**

"I keep a small looseleaf note book indexed under a number of headings, such as letters, sales, slogans, short cuts, purchasing, and management. When a business magazine comes to my desk I glance through it to see which articles look most valuable. Then on the front cover of the magazine I mark the pages on which these begin. As I finish an article I check the page number on the cover, so that I know where to resume reading next time. Every year I have my magazines bound. In vertical files I also put away similar information, indexed exactly like my note book.

"A new client of mine explained that his policy had been to use small space in a number of trade papers, with the idea of covering thoroughly each field in which he sold his products. In one field he had included about

$1,000 is worth saving in any office, we'll all agree

$150 a month for space in five secondary pages and in one leader, at rates ranging from $32 to $60 a page. A little study of circulation and of information in my file showed that every man in the industry served by these papers was a subscriber to the leader. It is a limited industry, in which but 160 companies in America are engaged.

"This led to a right-about-face in policy. Instead of spending $1,800 a year we took $250 in a lump and worked that field thoroughly by mail.

"Our returns immediately jumped considerably. In this one field we saved that year over $1,000. Similar action resulted from looking up, in my magazine index and clipping files, the information on this man's other fields. We reduced his total appropriation over 75%—he manufactured a technical product—and increased his business at the same time. My handy source of information deserves all the credit."

## CHAPTER XXII

# RECORDS FOR THE ONE-MAN BUSINESS

**A really "informational" bookkeeping system**

SIMPLE yet accurate records of accounts are essential in the strictly "one-man business." Lawyers, physicians, dentists, photographers, artists —all are specialists, and time is their chief stock in trade. Therefore, they cannot spend more than a short time each day in non-productive labor, such as bookkeeping.

As a rule men of this type take care of their own records, so these records must be simple. Simplicity, however, is not incompatible with an accurate record of essential details.

A day book, a cash book, and a card file comprise the simple records which show one physician just how his business stands at any time. A very few minutes each day suffice to keep them up to date.

Even the regular phraseology of bookkeepers is disregarded in the day book, a page from which is shown in Figure 171, where the usual terms do not make for simplicity. For instance, instead of the usual Dr. and Cr. he uses expressions which mean the same thing—"coming in" and "going out.' This simplifies matters for the man who is not an expert accountant. The "coming in" column is subdivided into "charged" and "received" columns; and the "going out" column into "spent" and "paid" columns. The "detail" section gives a complete history of what happens in each case.

**How one physician uses it successfully**

The letters D, V, C, and M are explained by the key at the top of the page. When any one of the first three columns is affected by an entry, the physician simply places a checkmark in the proper space. In the last of these four columns, however—the one for medicine—he notes the amount charged.

The separate items as they are entered show how the day book works. On the 29th of August the physician

called on John Harrison. The V checkmark indicates the call at the house. This patient required 50 cents' worth of medicine, and the physician charged $4 for his services—making a total of $4.50 in the "charged" column. The patient did not pay at the time. Otherwise, the amount would appear in the "received" column.

**How various transactions are recorded**

A little later Mr. Colfax called at the office. The physician charged him $1 for examination and advice—no medicine. The patient paid before he left. Next the physician himself purchased some medicine for stock—worth $7.50, for which he did not pay at the time. If he had paid, the amount would appear in the "paid" column.

Mr. Carter required 60 cents' worth of medicine, and the amount charged him for time and services was $5.60. He paid $2. Next in order the physician received $5 from Mr. Harris on a bill the latter had been owing—the checkmark in the D column indicates that the sum had been charged at an earlier date.

**The ragged edges are kept straight in this way**

Those five transactions cover nearly everything that could come up in the day's work. Two others might have occurred. For instance, the physician could have bought something on the 29th, and paid for it at once; or he could have paid on an old bill. Those two transactions complete the list of seven possible transactions, all of which are compactly taken care of by the record.

The ragged edges in this book are the things not completed. They are, first, the charges made for which full payment has not yet been received; and second, bills incurred but not paid. The physician has ledger cards to catch up these loose ends. These are 5 by 7-inch cards and have columns for charges, credits, and balance due. At the beginning of each day the physician goes through his day book and posts to these cards.

**Keeping track of the day's business**

"The entries for a single day," he says, "average only 20 or 30. The entries to be posted very seldom run more than 15. So you see my bookkeeping task is not arduous."

The "coming in" charges are posted first. The cards of all patients whose accounts are open are filed in a little tray by themselves, back of an "unsettled" tab. "Settled" accounts are filed in the same tray, but behind a "dead" tab. The physician puts each card in

**Only three records are used**

the latter classification as soon as the account is cleared up. Therefore, he has always before him the means of knowing exactly what sum of money is outstanding and due him. Also, when he sends statements he does not have to go through a large number of cards that are dead. This is an important time saver for the man who writes his own statements.

The items that are "spent" but not "paid," and also payments on past bills, are posted in the same way. These two files, therefore, give a complete record of assets and liabilities in unpaid bills.

One other record completes the set—the cash book. Totals only are posted to it and the posting is done whenever a day book sheet gets full. Items in the "received" column are totaled and posted to the debit of cash; and the totals of items in the "paid" column are cash credits.

**Another system for more complicated transactions**

A trifle more elaborate system than this enabled a surgeon who was badly overworked to throw off the irritating office details and expand his practice greatly, with less work.

A year ago the office force consisted of a single, overworked physician and an average office girl. This physician was busy day and night developing a surgical specialty out of an all-round practice. He was doing more than he could handle properly and was getting nowhere. Routine detail had piled up until he did practically nothing but answer the call just ahead of him.

This physician decided to see if an expansion of his organization would solve his problems. Today his organization consists of himself as surgeon; an intern; an eye, ear, nose, and throat specialist; a secretary; and a combined office girl and stenographer. Each member of this group is doing his particular work and the group as a whole is becoming increasingly effective. The division of duty has allowed each to specialize, so that a greater amount of work is being done, yet each has time for the necessary study and recreation.

**Controlling the details**

The plan being put into effect is to control and eliminate details. Broadly, this is accomplished by analyzing and arranging the work of each member. While the illus-

D - Due – Past Charge
V - Visited Patient
C - Patient Called
M - Medicine

| | | DETAIL | | | | COMING IN | | | | GOING OUT | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DATE | ITEM | D. | V. | C. | M. | Charged | | Received | | Spent | | Paid | |
| 7/29/18 | Harrison, John | | ✓ | | 50 | 4 | 50 | | | | | | |
| | Samil. Colfax | | | ✓ | | 1 | 00 | 1 | 00 | | | | |
| | Capsules 24 (2 doz) | | | | | | | | | 7 | 50 | | |
| | Carter, F. H. | | | ✓ | 60 | 5 | 60 | 2 | 00 | | | | |
| | Harris, E. C. | ✓ | | | | | | 5 | 00 | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

FIGURE 171: The doctor who devised this form says that he could not keep straight the mysteries of "credit" and "debit." So he uses plain, non-bookkeeping English expressions in their places. He found that "coming in" and "going out" serves the purpose, and that with the code of letters, the card clearly shows all the details of each transaction.

Thursday, January 15th

| | | | | | |
|---|---|---|---|---|---|
| 8 | | 1 | | | |
| 8:30 | Mrs. L. I. Johnston | 1:30 | | | |
| 9 | | 2 | | C. F. Casey | |
| 9:30 | | 2:30 | | | |
| 10 | | 3 | | | |
| 10:30 | | 3:30 | | Mrs. A. D. Monroe | |
| 11 | Mr. A. P. Weston | 4 | | | |
| 11:30 | | 4:30 | | | |
| 12 | | 5 | | | |
| 12:30 | | 5:30 | | | |

FIGURE 172: This appointment card gives the clearest sort of picture of the day's work, and prevents making appointments which overlap. The time required for each visitor is indicated by drawing a line through the column of minutes. Although this card happened to be used by a dentist, it could be used by any business man, it is clear.

**This system should have a wide adaptation and application**

tration of the division of labor will be of use only to those similarly organized or who contemplate such an organization, the methods used in disposing of the work may no doubt be found of service to all professional and business men having like problems of dragging detail.

To the surgeon this means that he is given the greatest possible freedom to devote himself to operating, examinations, reading, and recreation. It becomes the part of the assisting physicians to do as much as possible of the preliminary examinations. Thus, in many cases, the patient comes to the surgeon with a case report already made out, including the routine physical examination, special examination of organs of sense, and any laboratory examinations that may be indicated.

**Where the case report fits in**

The minute this preliminary examination starts, business detail also commences to roll up. All business detail is centered in the secretary's office, through the use of the following methods. The original record, upon which practically all the others are based, is the case report. This report was developed from a study of many similar forms in everyday use in the offices of physicians. As the office equipment includes a duplicating machine, the case report blanks, which are letterhead size, are printed right in the office and from time to time the "copy" is changed as improvements are suggested by experience.

Supplementary forms are printed for recording the results of laboratory examinations. When made out, these are attached to the original case report by small paper clips. They are so arranged that three and four repeated examinations may be noted in parallel columns on the one slip, thus allowing ready comparison of a patient's condition over a period of several days.

**"Knowing" all about the customer on one card**

The head of the case report, including the first four or five lines, is arranged to allow for business details about the patient: his name, address, telephone address, whether he is financially responsible, the name of the person by whom referred, and occupation. Considerable care is insisted upon in filling out this part of the record. The case records are filed alphabetically and are checked directly into the ledger, a charge being made for every examination.

This man is not bothered with detail

One other record also serves to keep the secretary's office in close touch with the work done by the surgeon: namely, the day book. It is kept by the head of the group and is a running account of the work done by him. Upon his arrival from the hospital, where he spends the morning, he jots down in this day book a memorandum of the services performed, going into some detail as to the various clinical elements of operations, and where possible, such details as fees and terms. The clinical detail is used to complete the case report, and the business detail is, of course, checked into the ledger.

In like manner, at the end of the afternoon office hours, a few moments suffice to make a running memorandum of examinations, consultations, and other services. A list of the patients who have come in during the afternoon is made out by the office girl, who checks any oversight in writing up the afternoon's work. This list is copied from a small note book in which the girl writes the name of every person entering the office, and any essential remarks that may have been passed at the time.

The ledger, into which the day book items are posted, is a standard ruled ledger form. It gives a compact, easily accessible record. A single sheet will take care of the average surgical case and, where necessary, additional sheets are used.

How collections are handled

Some of the special features are here told by a member of the "staff":

"As we use our ledger primarily to facilitate collections, we have improvised a system of code marking that allows us to know at a glance the exact state of negotiations to date with any patient. We maintain a definite routine of collection effort, but it is, of course, flexibly applied. Every month every open account receives some attention. This attention varies as follows:

"After the completion of the services rendered, the fee in full is affixed and a statement is sent. If there is no response, the next month a second statement is rendered, which is in its turn followed up by a notated statement.

"Nine times out of ten these notations consist simply of 'Please'—and they are very effective in stirring careless accounts. If neglect is apparent, the notation is changed to 'Please remit at once,' or something similar.

**Following up the "slow-pays"**

If there is still no response, a courteous letter is written. Most of these letters aim to help the patient to see the doctor's point of view, the simple justice of a legitimate fee.

"Sometimes, where it is impossible to secure any response, we assume the possibility of some error or misunderstanding on our part, simply to secure a reply. This is a rather dangerous sort of letter to write, as advantage may be taken of it, but a patient who answers is usually easier to collect from than one who pays no attention to our efforts.

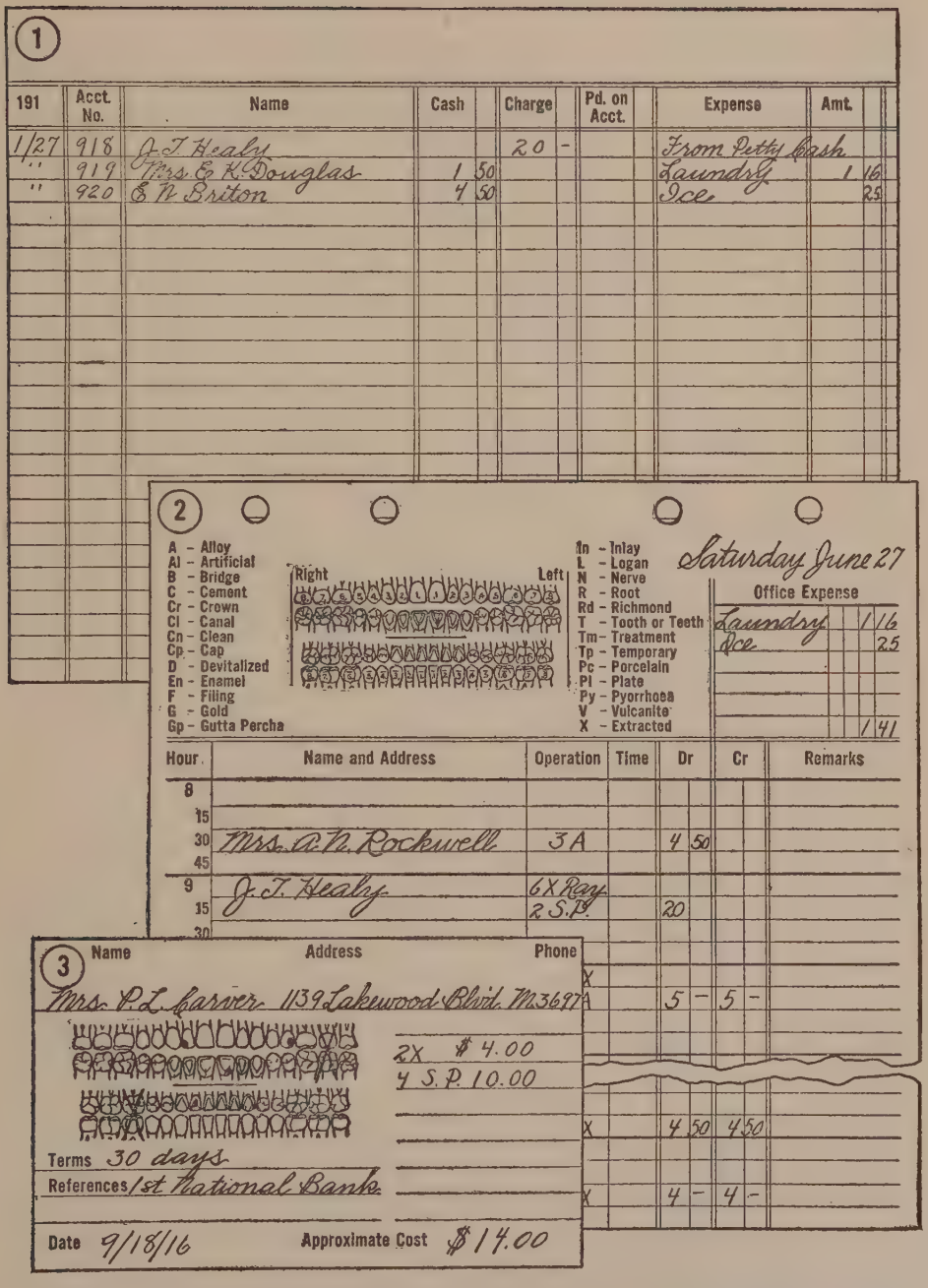
"We try to arrange regular monthly payments with those having small means. We find that a note signed at the time the services are completed acts as a stimulus to paying promptly. Only when necessary the accounts are given to a reputable collector; or, in some cases, to an attorney with instructions to use all the necessary means for collection.

**—is made easy with this system**

"To keep track of the negotiations necessary to collect an account, note of each communication is made on the ledger leaf. We write only the date of the communication. Its position in the column serves to indicate the nature of the communication. For instance, the date of the first statement is placed in the credit month 'date' column. The date of the second statement is placed in this same column directly under the first. The date of the notated statement is placed in the 'date' column and a letter is dated in the 'item' column—also perhaps two or three words giving the gist of the message. With this record of each account, it is easy to know just what to do to further the effort of collection.

**Unusual cases are handled effectively by this plan**

"Sometimes no statement is to be sent for several months. Then, if the collection does not come in, we know it is not necessarily 'slow,' but that for our own reasons the account has been allowed to lie dormant. Often a patient who is slow will excuse himself on the plea that he has received no statement. Usually we allow this excuse, but we know for our own satisfaction whether it is correct or not. Accounts which are due for attention on other days than the first of the month, have a minute metal clip placed over the date desired along the right-hand margin.



(1)

| 191 | Acct. No. | Name | Cash | Charge | Pd. on Acct. | Expense | Amt. |
|---|---|---|---|---|---|---|---|
| 1/27 | 918 | J. T. Healy | | 20 - | | From Petty Cash | |
| " | 919 | Mrs. E. K. Douglas | 1 50 | | | Laundry | 1 16 |
| " | 920 | E. N. Briton | 4 50 | | | Ice | 25 |

(2)

A - Alloy
Al - Artificial
B - Bridge
C - Cement
Cr - Crown
Cl - Canal
Cn - Clean
Cp - Cap
D - Devitalized
En - Enamel
F - Filing
G - Gold
Gp - Gutta Percha

Right — Left

In - Inlay
L - Logan
N - Nerve
R - Root
Rd - Richmond
T - Tooth or Teeth
Tm - Treatment
Tp - Temporary
Pc - Porcelain
Pl - Plate
Py - Pyorrhoea
V - Vulcanite
X - Extracted

Saturday June 27

Office Expense

| | | |
|---|---|---|
| Laundry | | 1 16 |
| Ice | | 25 |
| | | 1 41 |

| Hour | Name and Address | Operation | Time | Dr | Cr | Remarks |
|---|---|---|---|---|---|---|
| 8 | | | | | | |
| 15 | | | | | | |
| 30 | Mrs. A. R. Rockwell | 3 A | | 4 50 | | |
| 45 | | | | | | |
| 9 | J. T. Healy | 6 X Ray | | | | |
| 15 | | 2 S.P. | | 20 | | |
| 30 | | | | | | |
| | | X | | | | |
| | | A | | 5 - | 5 - | |
| | | | | | | |
| | | | | | | |
| | | X | | 4 50 | 4 50 | |
| | | | | | | |
| | | X | | 4 - | 4 - | |

(3)

Name — Address — Phone

Mrs. R. L. Garver 1139 Lakewood Blvd. M3697

2X $4.00
4 S.P. 10.00

Terms 30 days
References 1st National Bank

Date 9/18/16 Approximate Cost $14.00

FIGURE 173: The three forms shown in this picture constitute the office system of a dentist who knows where he stands at all times. At the top is the day book showing receipts and expenses. In the middle is the daily record of engagements, work done and the charges to be made each patient, and at the bottom is the customer's examination card.

One clerk handles these records without difficulty

"If we are exact in our attention to collections, we are also scrupulous in thanking patients for money remitted. Every sum credited is acknowledged, either by a receipt upon which 'thanks' is written, or—if the case warrants it—a letter of acknowledgment.

"Early in our organization we found that a great deal of detail could be left to the office girl if her time were properly arranged. So we have given special attention to planning her day's work. Most of the patients call in the afternoon. Thus she has plenty of uninterrupted time in the morning to put the reception room in order, attend to the private rooms of the doctors and replenish the reserve supply of dressing materials. We buy practically all our materials in quantity, and make up our supplies as we need them.

"After the office has been put in order and restocked for the day, the girl is ready to finish copying dictation from the previous day and to take additional dictation. In the afternoon the girl is kept busy receiving patients in the reception room and preparing them for examination. After the rush of visitors has subsided the girl takes dictation of diet lists, instructions to patients, and correspondence. Also, at this time, each doctor writes up his day book, checking up with the stenographer's desk list if necessary. One of the office mottoes is, 'clean up your desk before leaving.' Emergencies, of course, may get in the way of this, but it has become an office habit and helps wonderfully to get things done with the least amount of mental friction.

This system is not merely a history

"As much of the office detail as possible is centered in the secretary's office. Here are the reference library and the files of current professional periodicals. The biyearly indexes of these journals are segregated and in a few minutes the latest information upon any subject can be placed on the desk of the doctor calling for it.

"Our business records are as simple as we can make them. We are interested in them not only as evidences of our past and present standing, but we try also to get some help for the future out of them. For this purpose we get our statistics into graphic form. At present we keep graphic records of collections, of examinations, and of X-ray exposures. All these records will be more

**HUGHES, BROWN & HARRISON**

RECORD OF _____ FOR _____ 19___

| OFFICE CASE NO. | DETAIL | CHARGE TO | AMOUNT |
|---|---|---|---|
| 302 | Argument before Judge Brown, Dietz vs. Kirby | Dietz | 3 hrs. |
| 361 | Conference with Haynes re. proposed suit against City RR | Chas. Haynes | 3/4 hr. |
| | | | |
| | | | |
| | | | |

FIGURE 174: Even a lawyer should know where his time goes if he is to be sure that clients pay for what they get. This time sheet does the work for one progressive firm.

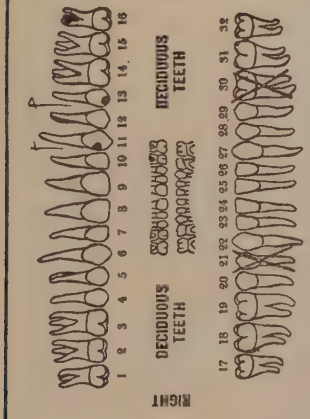
**CARTER, SPENCER, & HALL**

DAILY RECORD DATE February 21 1915

NAME J Carter

| HOURS | NATURE OF SERVICE | CHARGE | AMOUNT |
|---|---|---|---|
| 8:30 A. M. to 10:00 | Examination of authorities - Cutler vs Cutler | John Cutler | 1 Hr |
| 1:45 to 3:30 | Dictation of brief in Cutler vs Cutler | J Cutler | 1½ hrs |
| 3:45 to 6:15 | Interview A, B & C, witnesses in Johnson vs Kelly | Frank Johnson | 1½ hrs |
| 5:30 to 6:00 P. M. | | | |

FIGURE 175: This form accomplishes the same result, but does it perhaps easier, as the work day is divided at the left in 15-minute intervals which are marked easily and quickly.




Name N. E. Singleton No. 45

Address 719 Praire Avenue

Referred by W. W. Mason

| DATE | REMARKS | DR. | CR. |
|---|---|---|---|
| 8/22/16 | 2 X I B C P. 2 A | 9 50 | |
| 9/10/16 | | | 9 50 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

FIGURE 176: Here is another simple customer's card also used by a dentist. It shows the standing of the account, but has other uses, too. When the patient enters the anteroom for his appointment, the attendant gives this card to the dentist who can refresh his memory as to the case while he finishes his work on the patient still in the chair.

**Here are some more effective graphic charts**

valuable when we have two years' curves to compare. Then seasonal changes may be discounted and we shall be able to predict more accurately.

"The collection or income curve will be of greater value as we chart the expense curve immediately under it. We shall then be able to study the relation between these and find out just how much our increase in income costs in extra overhead expense.

"The labor of collecting and jotting down these statistics is infinitesimal; yet just the three records we have so far plotted over a short period of time give us a better idea than we ever had of the trend the business is taking.

**Filing photographic plates**

"In the X-ray department all plates are filed permanently, forming a record that may be called into court at any time. We file the plates in yearly groups. Every exposure, consisting of one or more plates, is numbered consecutively. For the current year we have taken the number 4001 for the initial exposure. Next year 5001 will be the number of the first exposure; 6001 the year after that and so on.

"The plates, after development, are placed in envelops marked with the name and number, and are filed according to number. The names are indexed alphabetically in a small book, each name being followed by its number. Thus the plates are instantly accessible and can be returned with no delay to their proper places after reference to them.

**Working on schedule**

"The entire work of the surgeon at the head of this group is organized to allow time for rest, recreation, and reading as well as work. The tremendous strain of daily operating can be endured only when careful attention to both rest and recreation is insisted upon.

"Following eight hours of sleep, the rising bell comes at 6:30 and at 7:30 the surgeon is in the operating room. Heavy operations are always scheduled for the hour of 7:30 or 8, as both the surgeon and nurses are fresh and the later rush of a busy hospital is avoided. After leaving the operating room, there comes the regular daily visit to all hospital patients and then from an hour and a half to two hours for lunch, preferably with some 'non-professional'—this, so that the tendency to

'talk shop' will be avoided. From 2 to 5 the doctor is in the office, examining patients. Two examining rooms are provided, each with practically duplicated equipment. It is part of the office girl's duty to see that a patient is waiting in each room. No time is lost while patients prepare for examination, or dress following one.

**A system with only five records**

"We might go on citing further incidents in the application of our methods, but these will suffice. Our method with modifications, I am sure, may be applied in part at least to any similar office."

The system used by an eastern dentist consists of five books and a standard size filing cabinet. The number of books sounds formidable. But the books are not. They are:

1. Appointment book
2. Day book
3. Cash book
4. Patients' ledger
5. Ledger of purchases

**—some of which are unusual**

Appointments are recorded in an 8 by 10 book ruled in such a manner that the 6 working days of each week are shown on the pages which face one another. This makes it possible to schedule hours with exact references to work ahead for the entire week. All 6 days are in front of the dentist without his turning a page.

The days are divided into hours and half hours, and one line is allotted to each division. Next to the hour column, another column is divided into six sections for every hour, numbered 10, 20, 30, 40, and 50, and the numbering is repeated for every hour. Whenever he makes an appointment, the dentist estimates the time he will need to devote to the patient. If the appointment is for 10:30 Thursday morning, and will probably last 40 minutes, he draws a pencil line through the 30, 40 and 50 division under 10:00 o'clock, and through the 0 division under 11:00 o'clock. A portion of a page from the dentist's unique appointment book—the record of one day—is shown in Figure 172.

Details of the treatment afforded each patient are recorded in the day book, an 8 by 10 bound volume in which the entries are made chronologically, patient by patient. Columns are devoted, in turn, to the date,

1918 K.L.+M. Cincinnati Bridge

| Week of | Mon. | Tues. | Wed. | Thurs. | Fri. | Sat. | Total | Rate | Debit | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| July 3-8 | 2½ | 1 | 5 | 7 | 7 | 3 | 25½ | 5.00 | | | |
| 10-15 | 6 | 7½ | 6 | 5½ | 7½ | 3½ | 36 | | | | |
| 17-22 | 6½ | 2½ | 4½ | 4½ | 0 | 3 | 21 | 117 | 585 | 00 | |
| 24-29 | 7 | 3½ | 2 | 3 | 5 | 7 | 27½ | | | | |
| 31- | 7 | | | | | | 7 | | | | |
| Aug. 1-5 | — | 4 | 7 | 6½ | 7 | 2 | 26½ | | | | |

FIGURE 177: Each job is given a card on which a record is kept of the time charged against that job. At the end of each month the time is totaled and multiplied by the hour rate. Such a form, because it is so simple, is especially adapted to the needs of the business man who keeps his own records. Cards like these may be kept in a handy file.

K.L.+M.R.R.

1918

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Feb. | 1 | Quincy Bridge | | | 2 | 5 | 00 | Feb. | 14 | Check | | | 2 | 5 | 00 |
| Mar. | 21 | Keokuk " | | | 3 | 7 | 50 | Mar. | 14 | " | | | 3 | 7 | 50 |
| April | 1 | Davenport" | | 1 | 1 | 0 | 00 | April | 15 | " | | 1 | 1 | 0 | 00 |
| May | 1 | Davenport" | | 3 | 0 | 0 | 00 | May | 11 | " | | 3 | 0 | 0 | 00 |
| June | 21 | Davenport" | | 1 | 8 | 2 | 50 | July | 13 | " | | 1 | 9 | 2 | 50 |
| June | 29 | Cincinnati" | | | 1 | 0 | 00 | July | 14 | " | | | 1 | 5 | 00 |
| July | 1 | Cincinnati" | | | 1 | 5 | 00 | Aug | 9 | " | | 5 | 8 | 5 | 00 |
| Aug | 21 | Cincinnati" | | 5 | 8 | 5 | 00 | | | | | | | | |

FIGURE 178: This "ledger card" carries all charges made against the individual job. To the right, a record is kept of all payments so that the engineer can tell at once just how he stands on any account. The simplicity of this record takes away much of the work that many business and professional men believe is attached to all bookkeeping.

**How many transactions need be recorded?**

the patient's name, a record of just what was done, and the charge; and, if the patient pays in full or in part, the amount is credited in another column.

The cash book is a bound book, a simple day book style of journal, in which columns are provided for dates and details. There are two "amount" columns: in one, amounts of incoming cash are debited; in the other, outgoing cash is credited.

When sums of money are received on old accounts, they are charged at once in the cash book. When, however, the patient pays at the time the work is done, the amount received is entered in the day book. These incoming sums are posted from the day book to the cash book, as a charge to cash.

Charges, as well as credits in the day book, are posted to the patients' ledger each day. This ledger is a loose-leaf volume. There is a single page for each patient, devoted to the date and details of each treatment or transaction, and to columns for recording the amounts charged and received.

**Checking up on accuracy**

Postings to this ledger are made from both the day book and the cash book. Inasmuch as items are also posted from the day book to the cash book, this is a check on accuracy, and does not materially increase the amount of work. The day book postings are made first—cash receipts to the cash book, and then complete entries to the ledger. Then the cash book receipts for the day are posted to the accounts affected; only, care is taken not to post a second time an amount that has already been posted from the day book. The two figures are compared, and any error is caught and rectified.

When a payment from a patient causes his account to balance, his page is at once removed from the book and filed in the dentist's letter cabinet. This keeps the ledger clear of all superfluous and dead material, and makes the record very workable.

The purchase record is very simple—in fact, a mere ledger account with the different supply houses. It serves to show him exactly what his tools, rent, office furnishings, and the like, cost him. Set against his income from his work, these figures show just how much he is making.

**It only takes an hour a month to get out statements in one concern**

Only a few minutes each day are required to handle this system of records. Remember, if the books seem numerous, that at most only 20 entries are made in one day, and the time necessary for entering and posting them is never great. The making of statements requires an additional hour or so each month. With these books, the dentist has an accurate history of every case he has handled, as well as an accounting of the results of his time and labor.

Another prosperous dentist believes that without good records a professional man cannot prosper.

"Very few patients of the physician or dentist pay cash," says he. "For success, therefore, the doctor must be sure to make an entry for every bit of work done and the numerous accounts must be watched closely.

**A somewhat different system**

"My advancement," continues this dentist, "is due in a large measure to my system of keeping accounts. Perhaps the first feature of my system which should be considered is the examination blank (bottom, Figure 173). When a patient comes in and asks me to 'look things over,' I examine his teeth, ask him what kind of fillings he prefers, advise him as to what kind he should have in certain teeth, note whether special treatments are necessary, and make a memorandum of all these particulars on this little slip. If the patient wants to know what the work will cost, I make him a quotation and note it on the slip. The patient's name and address, and the date of the examination, are all important and so are recorded on this card.

**Keeping track of the work to be done**

"Diagrams of the teeth are also printed on the blank. I use the form common to most dentists, the two outer rows representing the outer surfaces of the teeth, the two inner rows the grinding surfaces. On these I indicate by black dots the exact spot on each tooth which is decaying. As the card is printed in red ink, these black dots are instantly discernible. A tooth to be extracted is marked with an X. For example, on Mrs. Carver's slip (shown on page 335), two grinders are shown to be in bad shape and I recommended that they be extracted. Four other teeth exhibited small cavities. As they were near the front of the mouth, I recommended synthetic porcelain fillings—which I abbreviate as SP.

| 1916 | Taylorville Bridge | Sundry Expenses | Payroll | Total Cost |
|---|---|---|---|---|
| July 8 | R.R. Fare round trip $12.00 Hotel $3.00 | 15.00 | | |
| " 13 | 3 da. J.H.V. @ $75.00 | 225.00 | | |
| " 15 | Surveying Crew | | 176.43 | |
| " 22 | 2 da. J.H.V. @ $75.00, Labor | 150.00 | 143.12 | |
| " 24 | R.R. Fare round trip J.H.V. to P.K.L. $24.00 | | | |
| | Hotel $5.00, Meals $3.20 | 3220 | | |
| " 26 | Draft 1/8 Room, 2/4 da. J.H.V. @ $75.00 | 167.32 | | |
| | | 589.52 | 319.55 | 909.07 |

FIGURE 179: This is about as simple a way as can be found for anyone to keep a record of costs. A separate card is used for every job on which time, materials, overhead and traveling expense can be put down. When the job is finished the sundry expense, payroll and total costs are shown on the record with little chance of anything having been overlooked.

| | DETAIL | PRELIMINARY SKETCHES | | WORKING DRAWINGS | | FULL SIZE DETAILS | | SPECIFICATIONS | | BIDS | | EXCAVATION | | FOUNDATION | | SUPERSTRUCTURE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | S | F | S | F | S | F | S | F | S | F | S | F | S | F | S | F |
| 1 | Hutchinson, P | 7/16/16 | 7/30/16 | 8/2/16 | 8/10/16 | 8/9/16 | 8/20/16 | 9/2/16 | 9/8/16 | 10/1/16 | 10/30/16 | — | — | — | — | — | — |
| 2 | Drew Bldg | 8/7/16 | 8/30/16 | 8/15/16 | 12/23/16 | 11/4/16 | 12/10/16 | 12/15/16 | | | | | | | | | |
| 3 | Roth School | 2/23/17 | 3/17/17 | 3/13/17 | 3/23/17 | 3/29/17 | | | | | | | | | | | |
| 4 | Murphy H.A. | 2/24/17 | 2/28/17 | 3/1/17 | 3/9/17 | 3/7/17 | 3/11/17 | 3/13/17 | 3/17/17 | 3/19/17 | | | | | | | |
| 5 | Stillson, K | 2/28/17 | 3/7/17 | 3/9/17 | 3/23/17 | | | | | | | | | | | | |
| 6 | Hardy Home | 3/3/17 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | |

FIGURE 180: Progress sheets to show how work is moving are valuable in nearly every business. This architect keeps his in plain sight on his desk and finds that a minute or two a day is all that is required to keep it up to date. Then at a glance he can tell just how his work stands on any one of a dozen jobs. He uses this effective record daily.

**Laying out the work in advance**

"As soon as this slip is filled out I file it alphabetically in a small card-index case. Suppose Mrs. Carver calls me up a week or two later and asks for an hour when she can have her work done. With my engagement sheet before me, I go through the examination blank file to see whether I have recently inspected Mrs. Carver's teeth. Discovering her slip, I note the quantity of work to be done, and can determine pretty accurately how much time her work will occupy. This enables me to place her engagement in the day's routine so that there will be little loss or overlapping of time.

"After the work is done and entered on the ledger, I destroy this examination slip. Or, if the person examined does not return within six months to have the work done I destroy the slip, because by that time, unless the teeth have been attended to their condition will have become so much worse that the original charting will not apply.

"The next form used in the progress of a case is the engagement sheet (center form, page 335). My bookkeeper dates a number of these several days in advance and files them in order according to date. As engagements are made, they are noted on this sheet. A note is also made of the amount of time that seems to be necessary for each case. If someone whom I have not previously examined calls me up and asks for an engagement, I ascertain as nearly as possible how much work he expects to have done, and allot him time accordingly. If he has only one tooth to be filled or extracted, I perhaps give him 15 minutes. If there are to be two or three fillings, I assign him 30 minutes, and so on. Presently, my sheet for the day is fairly well filled.

**A card system that is valuable**

"The ledger card is one of my most important records. There is one of these cards for every person, no matter if he is a cash or a charge patient. On the front of the card is the record of work done for him, together with payments made, and a diagram of his teeth, as on the examination blank. On the reverse side of the card is a long list of printed 'remarks.' These are used to indicate a patient's physical condition. Among these are such items as, 'addicted to use of drugs'; 'bleeder'; 'told to return'; 'failed to return'; 'would not follow instructions,' and some 30 other items.

| DATE 4/24/18 | NAME Cable, Mrs. Albert B | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NUMBER 37654 | ADDRESS 1342 East 59th Street | | | | | | | |
| PROOF SENT 4/26/18 | ORDERED 4/27/18 | PROMISED 4/31/18 | DELIVERED | | | | | |

| STYLE | QUANTITY | SUBJECT | P. SIZE | NO.S. | AMOUNT | DEPOSIT | BALANCE | DATE PAID |
|---|---|---|---|---|---|---|---|---|
| 8X10 "Special" | 1 doz | Baby | 8X10 | 5 | 15 00 | 2 00 | 13 00 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**DUPLICATES**

| DATE | STYLE | QUANTITY | AMOUNT | DEPOSIT | BALANCE | DATE PAID |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

FIGURE 181: Right before him on his desk this photographer has a file containing cards, one for each customer. It takes only a few minutes a day to keep a complete record of each. Not only the date and amount of the order, but the kind of picture, subject, amount of money paid in advance and the amount due are also shown on this handy card "memo."

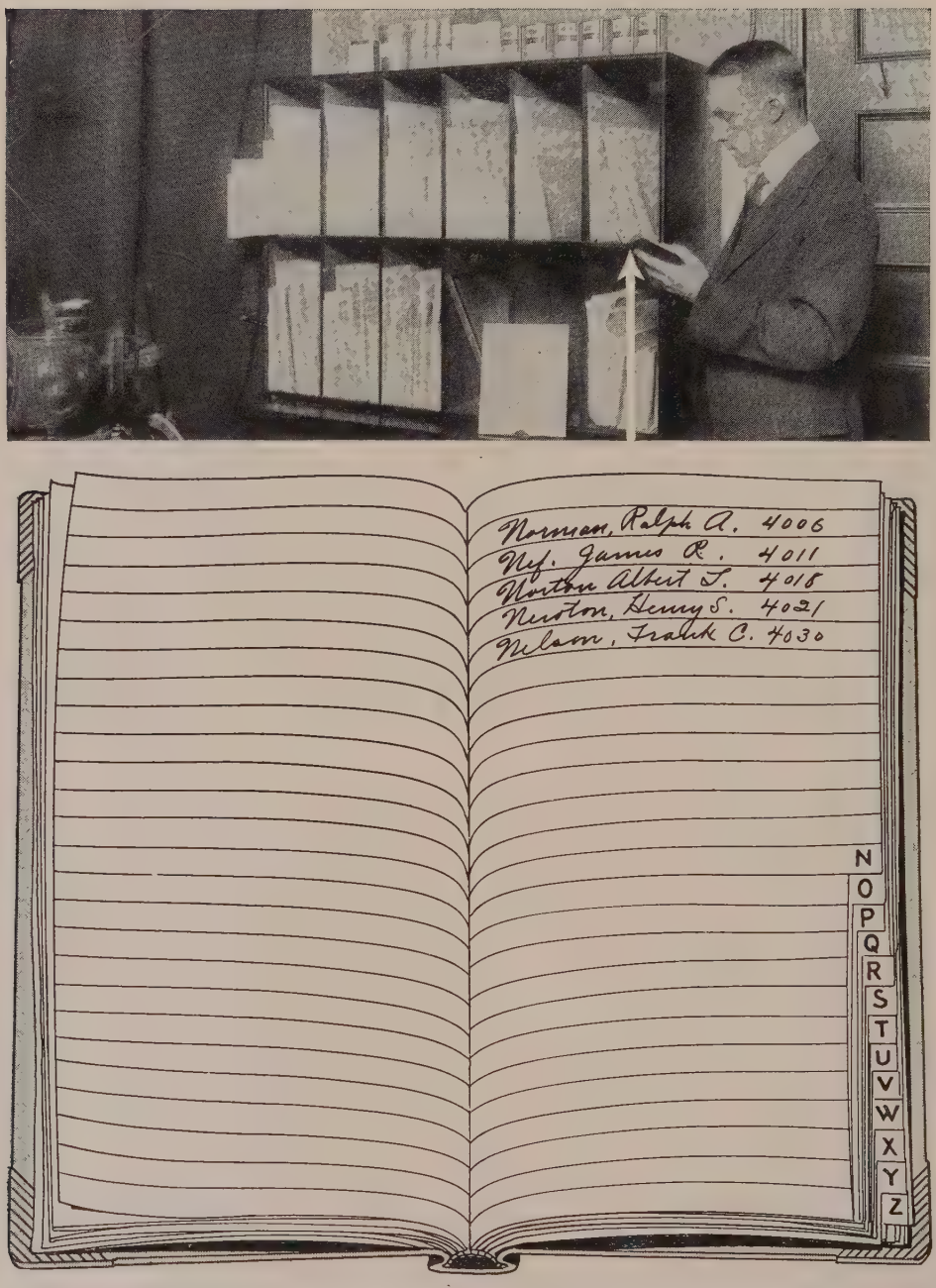



FIGURE 182: To take care of reorders one photographer puts the negatives in envelops and files them numerically on shelves as shown in this picture. Then when Frank C. Nelson wants half a dozen more prints, the little book gives his name and number under the "N's." The negative is thus quickly located and the order can be filled at once.

Handling a new patient

"When I fill out one of these cards for a patient, I place a checkmark opposite the notations that apply to him. This information is not only valuable to me in my future treatment of this patient, but it is also a protection to me in case of suit for malpractice. Every dentist or doctor, no matter how careful or how skilful he may be, is liable to be sued by a disgruntled patient.

"As soon as a patient enters the reception room, my bookkeeper meets him or her with a courteous greeting and takes the name and address on a slip of paper. Of course, many of the regular clients she recognizes at once.

"Having obtained the name and address, she passes back into her office and glances through the file to see whether there is a ledger card already on file for this patient. If not, she quickly makes one out, merely entering the name and address at the top. The engagement sheet shows the appointment hour. If this patient is to have my attention next, the bookkeeper passes into the operating room, unseen by the waiting patient, and places the card on a ledge in front of my instrument case. I may be working on another patient at the time, but as I pass to and fro, getting my instruments, kneading amalgam, or while I am waiting for the cement to harden in a crown I have just fitted to a tooth, I glance at the card and note all the information regarding the coming patient.

A card that gives personal information about the patient

"I am thus able to refresh my memory regarding the patient's peculiarities and know just how to take hold of the case. I am also able to greet the patient with some such question as, 'Well, how are the two teeth I filled last August?' or 'How is the molar I filled two years ago?' When Mrs. Sefler discovers that I recall treating her three years ago, she is apt to think more cordially of me.

"The card lies on the ledge nearly all the while I am treating the preceding patient. I almost always have two cards before me—that of the patient who is in the chair under treatment, and that of the one who is to enter the operating room next.

"As soon as I finish treating a patient, I enter upon the card the quantity and kind of work done, and the

**Using the cards to help in bookkeeping**

price—so many extractions, gold fillings, amalgam fillings, and treatments, or whatever the work was. I let nothing prevent my making this entry immediately after I finish with the patient, no matter how great the rush. In this way no charge is forgotten.

"Using the card as her guide, the bookkeeper now enters on the engagement sheet the quantity and kind of work done, the price, and whether charge or cash. The engagement sheet thus becomes a sort of day book. In the upper right-hand corner, the day's expenditures are entered from the petty cash, of which we always keep a small sum on hand.

**Three effective checks on each day's business**

"The next task of the bookkeeper is to enter each item in a combined journal and general ledger, a page is reproduced in Figure 173 (top). Cash and charge work are, of course, kept separate, and another column shows payments made on account. In the last column the day's expenses are listed.

"The entries on the ledger page include postings, of course, not only from my own engagement sheet, but from my assistants' also. Often it is necessary to transfer to these assistants certain patients who have been entered on my engagement sheet, but this causes no confusion, as the ledger cards are our chief guide. The totals on the ledger cards for the day must balance the totals of the two engagement sheets, and these in turn the ledger page. Thus we have three checks on our day's business.

**The advantage of a ledger**

"I still keep, in addition to these, an individual ledger, and enter in it all charge accounts and payments. I do this for the reason that there is a bare possibility that some card may be mislaid, which might mean the loss of considerable money. But, more important, if the customer has much work done, the card is soon filled; whereas in a ledger the account can be extended indefinitely. When a customer's card is filled, I enter his name on a new card with a new number. This causes no confusion, as the cards are filed alphabetically.

"All expenses outside of the petty cash—salaries, rent, new apparatus, supplies, and the like—we pay by check. My business account is kept entirely separate from my personal account.

EXPENSES FOR THE MONTH OF May 19 18

| Date | Detail | Printing | Finishing | Retouching | Overhead: Rent | Advertising | Heat and Light | Insurance and Taxes | General Expenses | Depreciation | Miscellaneous | Stock: Plates | Paper | Mounts | Chemicals | Total | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sat 1 | | 58 60 | 27 00 | 35 00 | 125 00 | | | | 4 76 | | | | | 3 90 | | 253 66 | |
| 2 | | | | | | | | | | | | | | | | | 253 66 |
| 3 | | | | | | | | | 15 21 | | | 18 75 | | | 3 64 | 37 60 | |
| 4 | | | | | | | | | 8 93 | | | | | | | 8 93 | |
| 5 | | | | | | | | | 12 80 | | 1 50 | | 1 25 | | | 15 32 | |
| 6 | | | | | | | | | 5 98 | | | 20 50 | | | 6 00 | 32 48 | |
| 7 | | | | | | | | | 10 00 | | | | | | | 10 00 | |
| 8 | | 58 60 | 27 00 | 35 00 | | 25 00 | 7 28 | | 6 15 | | | | | | | 108 43 | 263 00 |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

FIGURE 183: Such sheets as this can be obtained blank so that the headings can be put in to suit individual needs. With such blanks, distributing the expense is so simple a job that it may be done by nearly anyone. No matter what the business, it's wise to know just where the money goes. This method goes a long way to keep your costs under control.

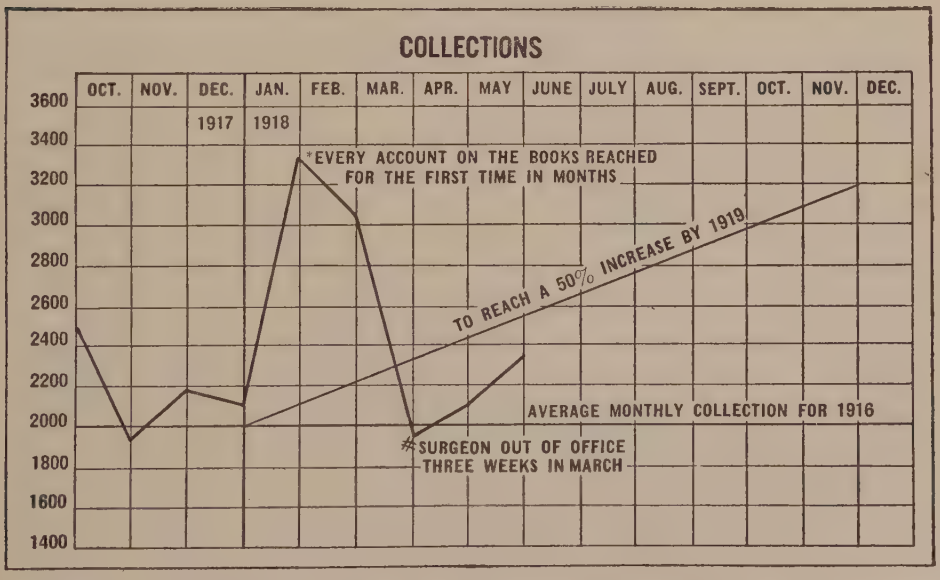



FIGURE 184: The surgeon who uses this graph is apparently a pretty good business man also, for he wants to know just how his "business" stands. With his collections visualized in this way it's easy to tell whether or not pressure should be brought to bear on delinquents. A graph like this is almost universally adaptable, it is declared by many.

**A balance sheet for the professional man**

"Each month we draw up a balance sheet, just as a manufacturing business does, so I know exactly how I stand all the time. I am sure that any professional man, even one who hasn't a very extensive business, would find it profitable to put in some such system as this. He will quickly find that he stops so many leaks that the plan pays for itself. Furthermore, the professional man who is strictly businesslike in his methods compels the respect of his patients in a much larger measure than his easygoing brother."

A firm of lawyers has a simple system which assures that the charges will be uniform and that all work done will be charged for.

"A 6 by 8 pad," says one of the firm, "is the basis of the system: it is our time card."

**Running a law office on a business basis**

One sheet from this unique record is reproduced in Figure 174. Observe that this sheet is divided into sections. Each task which the lawyer takes up he notes on one section, and a full sheet is ordinarily sufficient for the record of one day's work.

As soon as he finishes a task for which some client is to be charged, the lawyer writes in the space, under the heading "detail," just what he has done. In the "charge to" column he notes the name of the client to whom the work is to be charged. In the final column at the right—the "amount" column—he notes the time that he has spent on this particular work; or, if the work constitutes a complete case by itself, he notes in the column the sum that he wishes to charge his client.

**Where the system starts**

The time record is written in triplicate. The original and the first carbon copy are thin sheets of paper, but the second carbon copy is taken on a strip of fairly heavy cardboard. Of these three sheets, the original is kept by the lawyer himself and is filed as a complete record of his work from day to day. The second and third sheets go to the office clerk. He keeps the second copy intact, and uses it as the basis on which to make postings to the other office records. The third copy he tears into strips along the perforated lines.

Each case coming into the office is given a number, which the clerk writes in the column at the extreme left on the third copy of the time record. He files the sections

"254" Receipts

| DATE | EXPLANATION | DR. CASH | CR. RENTS | CR. MISC. | DATE | EXPLANATION |
|---|---|---|---|---|---|---|
| Nov 1 | Brot forward | 542 — | 542 — | | Nov 1 | Brot forward |
| 2 | Mrs. Martin | 18 — | 18 — | | 2 | Janitor |
| | Mrs. Graydon | 18 — | 18 — | | 19 | Gas |
| | Mrs. Farrell | 10 — | 10 — | | | Tapes |
| 16 | Mrs. Fischer | 10 — | 10 — | | 30 | Collection & Administration |
| Dec 2 | Mrs. Martin | 18 — | 18 — | | Dec 2 | Janitor |
| | Mrs. Graydon | 18 — | 18 — | | | Gas |
| | Mrs. Farrell | 10 — | 10 — | | | Paintings & Discount Rec |
| 31 | Mrs. Fischer | — — | 10 — | 10 — | 31 | Collection & Administration |
| | | | | | | H Kelly (new boiler) |
| | | | | | | Reserve for depreciation |
| | | | | | | Prepaid Insurance |
| | | 644 — | 654 — | 10 — | | |

FIGURE 185: This simple ledger sheet is one of the records kept by a real estate man for each of his properites. It shows where the receipts come from and how much goes out. It is perhaps adaptable to many other businesses where bookkeeping must be reduced to the simplest possible form. The "explanation" column is a valuable feature.

"254" Expenditures.

| CR. CASH | DR. TAXES | DR. WATER | DR. INS. | DR. INT. | DR. JANITOR | DR. HEAT | DR. LIGHT | DR. REPAIRS | DR. COL. AND ADM. | DR. DEPR. | DR. MISC. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 312 72 | 44 16 | 19 — | 20 — | 143 — | 40 — | | 15 60 | 79 20 | 11 76 | | |
| 4 — | | | | | 4 — | | | | | | |
| 1 36 | | | | | | | 1 36 | | | | |
| 44 16 | 44 16 | | | | | | | | | | |
| 1 54 | | | | | | | | | 1 54 | | |
| 4 — | | | | | 4 — | | | | | | |
| 1 92 | | | | | | | 1 92 | | | | |
| 24 50 | | | | | | | | 25 — | | | 50 |
| 1 39 | | | | | | | | | 1 39 | | |
| —— | | | | | | | | 20 — | | | 20 — |
| —— | | | | | | | | | | 120 — | 120 — |
| | | | 5 — | | | | | | | | 5 — |
| 455 59 | 88 32 | 19 — | 15 — | 143 — | 48 — | | 18 88 | 124 20 | 14 69 | 120 — | 145 50 |

FIGURE 186: The same man segregates the expenditures for each property on this card, so that he has at a glance a classification of accounts. But the best part of this record is that it can be kept without the aid of a bookkeeper at an expenditure of only a minute or two a day. Totals may be taken off at the end of the month, if desired.

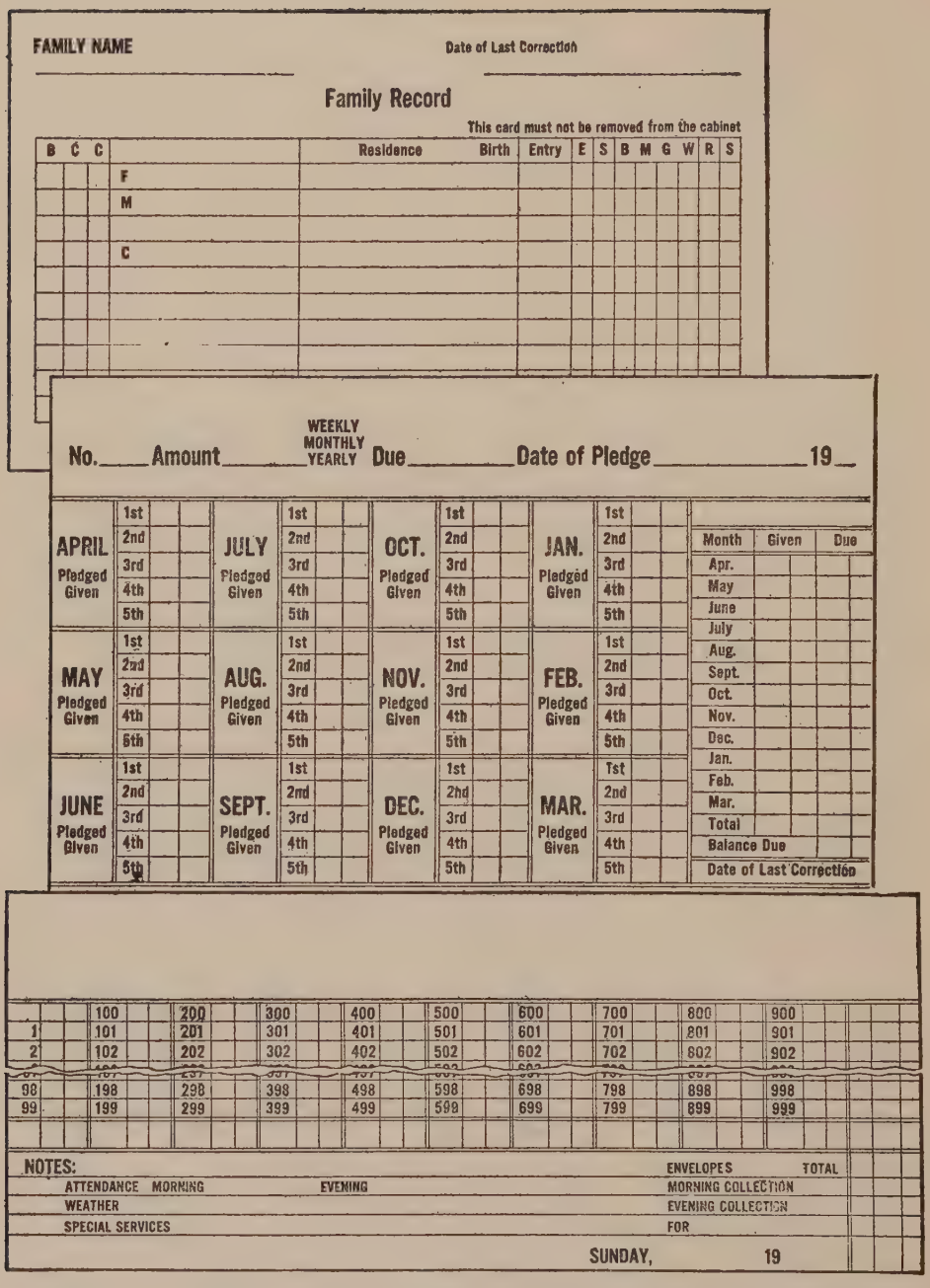



FIGURE 187: Perhaps you never thought of a clergyman as a business man and yet if he is to be most effective he should have records that will tell him all he needs to know, and which he can keep himself. That means that the records must be simple and easily kept. The three shown effectively meet the requirements of one minister without great detail.

**A clerk handles all the records**

according to these case numbers. In this way, all charges and the record of time spent for any client are assembled conveniently in a single place, so that when a bill is to be rendered, a record of the total time given the case is at hand.

A complete list of these charges is turned over to the clerk. He goes over them, and on each one refers back in his ledger to find the amount of previous charges against the same client. If the charge is in accord with earlier ones, he bills the client accordingly.

The clerk, as soon as charges against a client have been fixed, files "dead" all the cards standing against this client that have been considered in the charge. These are kept for a certain period as detail records, but a summing up of them, together with the amount of the charge, is entered against the client in a looseleaf ledger. When the client pays, he is, of course, credited in the same place.

**A time sheet for the lawyer**

A time sheet used by the members of another firm is shown in Figure 175 on page 337. Only one copy of this sheet is made, and this is not so easily filed as the third carbon of the other time sheet. The distinguishing feature in connection with it is the column at the left, which shows the working day divided into 15-minute periods. This record, at the end of the day, goes to the office clerk, who enters each charge—no matter whether it is expressed in hours or dollars—against the proper account; and at the billing period the amount to charge is determined.

**Two simple records used by one engineer**

The complete set of books kept by a consulting engineer consists of a page-a-day diary and a small file box containing 3 by 5 cards. The diary is a day book. The box contains time sheets and ledger. On the margin of each sheet in the diary all the hours from eight in the morning to six at night are printed with a rubber stamp. On each job he checks the hour of starting and stopping and writes the name of the job alongside. This gives a complete time record.

In this engineer's card index, which is alphabetically arranged, the individual job time cards are filed with the ledger cards—the ledger account first, and the time card whose entries are charged under that account behind it.

**Ledger entries are made monthly**

The engineer posts his time from the day book to a time card, like that shown in Figure 177. He totals these cards weekly, and multiplies the totals by the hour rate that he charges. This charge he places against the customer on the ledger card.

Ledger entries have to be made only at the first of each month. Statements go out at the same time. Since the time cards are already in the file box behind the ledger cards, it is a simple job to make the entries. The engineer keeps one ledger account for general expense, and his experience shows that most of the day book entries go into it, unless these entries can be charged to specific jobs. Figure 178 on page 340 shows the simple ledger card used. This method is perhaps especially well suited to the needs of the engineer whose business is purely of a consulting nature.

Another engineer, one who makes it his business to go over the job on the ground, who watches the construction on occasional trips to the scene of operations, and is, on the whole, more immediately concerned with the actual work which he designs, finds a cost record absolutely necessary.

He uses a time card very much like that used by the consulting engineer, and he supplements this with a cost card. In the case of the first engineer, time is practically the only element of expense and the entire stock in trade; but with the supervising engineer many other items enter into account. Figure 179 on page 343 shows one of his cost cards. This particular one illustrates his work on the Taylorville bridge.

**Keeping costs in an engineering office**

All expenses connected with the design and supervision of construction on the Taylorville bridge he charges on this card. The sum total of both columns is posted monthly to the ledger card, as in the case of the time sheet of the consulting engineer.

"I keep these books with almost no loss of time," says this engineer. "The day book is, of course, marked as the various items come up. Every afternoon before leaving the office I post my time account to the time sheets. This takes perhaps five minutes or less, for I seldom work on more than four or five jobs, at an outside estimate, in a day.

| | | | | | |
|---|---|---|---|---|---|
| Name Angus F. Bertrand | | | | Date Year 1918 Referred Month March | |
| Address 17 East 122d St. | Floor | (F.) B. L. R. Rooms | | Rent 35.00 | |
| Previous Address | | | | | |

Referred by Mrs. A. C. Moore

Age 43 Church Episcopal School . M.S.W. (D) Sep.

Nativity Spain How long in U. S. A.? 5 yrs Citizen yes How Long in City?

Occupation Mechanic Employer A. C. Hall and Company.

Income $1,800 Number in Family 3

Names Marguerite (wife); Henriette (daughter)

Age of Children 12 yrs

Nearest Relative Address

Sunday School Exchange Report

Physician Dr. F. B. Loyd

Hospital

Diagnosis Complications

Admitted Discharged

Operation

Contagious Diseases

## HISTORY

| Date | Referred to | Referred for | Accepted | Refused |
|---|---|---|---|---|
| 4 – 18 | Mrs. A. C. Wharton | Call | 4 – 22 | |
| | | | | |
| | | | | |

## PARISH NURSE RECORD

FIGURE 188: Part of this church's activity among its parishioners consists of having nurses call upon them. To systematize this work a record like this has been designed. The headings provide for all of the information that the church should have and paves the way to giving needed and worth-while attention to members of the congregation.

**How one architect keeps in touch with his work**

"So I find that all the time I require is an hour or so each month to make out and mail the statements, and perhaps five minutes a day for posting my time records. This small amount of bookkeeping, however, results in an accurate cost record to charge against every job."

A pocket size note book, a sheet of paper, and a 3 by 5 card give a well-known architect all the information he needs about the money end of his business.

In the note book he jots down all the information he gets about projected buildings, so that he can intelligently go after the prospective owners with a view to getting the architectural work.

The desk sheet is a schedule of jobs under way. The architect does much of the superintending of jobs himself, and this record keeps him familiar with just what is being done on them. As soon as he has secured an owner's word to go ahead and draw up plans for a building, he makes an entry on this schedule sheet. The sheet is illustrated in Figure 180 on page 343. Across the top are a number of column headings, each designating one particular phase of construction work, or work in the architect's office. Together, these headings constitute a list of all the things which the architect must see completed according to specifications before he can report the building as satisfactory, to the owner. Under each general heading of this sort are two smaller column headings, designated, in each case, by the letters S and F. The letter S stands for "started," and F for "finished."

**A tested system for reporting all jobs**

Running down the column at the extreme left side of the schedule is a series of numbers, with one number to each line. As a job is received, it is given the next unoccupied line on this schedule, being known from that time forward through all operations in the office by the number it receives on the schedule. In the second column, which has for its general caption "detail," one or two words are written to identify the building concerned at a glance.

Consider the first column heading at the top of the schedule sheet, "preliminary sketches." On the Roth school building—number 3—the record shows that these sketches were started February 25 and finished—that is, they received the owner's O. K.—March 12. "Working

FIGURE 189: Here is the "business end" of a firm of lawyers. The young man takes care of all records and sees to it that the lawyers get paid for their services. The professions are rapidly adopting the methods and tools of business offices. If they can do it, it should be easy for one business office to adopt the plans and systems of another business.

FIGURE 190: This is quite a businesslike looking office, more so than you might perhaps expect in a church. But this clergyman believes that the church's business affairs should be carried just like any other business. The secretary takes care of the records, correspondence, and routine, thus leaving the clergyman free for more important duties.

NAME Hall, Mr J. R. ACCOUNT NUMBER

ADDRESS 106 East 38th St. City SHEET NUMBER

| DATE 1916 | ITEMS | PAGE | DEBIT | DATE 1917 | ITEMS | PAGE | CREDIT |
|---|---|---|---|---|---|---|---|
| Nov 5 | Exam. Fracture Left Forearm | 123 | | June 9 | | 344 | 35 00 |
| " " | X-Ray 4176 | "X" | 5 00 | | | | |
| " " | Setting Cast | | 25 00 | 2-1-17 | | | |
| " 7 | X-Ray 4181 | | 5 00 | 3-1-17 | | | |
| 1917 | | | | 4-1-17 | | | |
| Jan 21 | Discharged | 204 | | | 5-1-17 | | |
| | | | 35 00 | | 5-15-17 Will pay June 1st | | 35 00 |

FIGURE 191: This ledger page gives one physician the necessary information about each case and also serves as a record of the client's account. It is kept by the doctor's competent woman assistant. A clear and simple account of services rendered, such as this, would help every business and professional man to follow his affairs more closely.

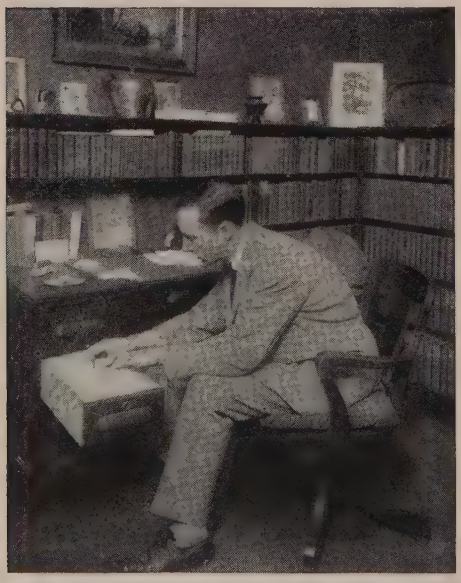


FIGURE 192: Desk drawers can often be used handily to keep records, thus doing away with any necessity of leaving one's desk and crossing the room to get needed information.

FIGURE 193: The cross index on cards is a valuable help to many correspondence files. As the idea of a file is to find letters quickly, should not every aid to this end be used?

drawings,'' the next column heading, were begun immediately, March 13; and were finished March 25.

**Effective progress-of-work records**

These entries indicate how the schedule is written up throughout. With this record, the architect has in front of him at all times an exact statement of progress on every building for which he is responsible. He puts in the starting dates just as soon as the contractor begins the various portions of the work, and the finishing dates as soon as these are completed to his satisfaction. Therefore, he can glance across his schedule sheet at any time and tell exactly the condition of work on every one of his buildings. He can check up progress, and knows at once where construction on some building is falling behind; where, on another, it is satisfactory; and where, on a third, it is beating the schedule.

**Keeping track of all drawings by one simple record**

In handling the rest of his office detail this architect is equally systematic. He has a number of large, canvas-covered folders, about 3 by 3½ feet in size, in which he keeps his sketches and drawings. These folders are filed in numerical order in small vertical racks, and each folder is tagged with a number corresponding to the rack in which it is kept. A simple index of the folders, of exactly the same kind as that written on the schedule sheet—so far as the information it gives is concerned—is pasted on a piece of cardboard.

All drawings connected with a job are filed in its folder. When the building is completed and there is little possibility that the drawings will be needed further, the folder is taken out of the current racks and put in a transfer rack.

Each drawer of the filing cabinet is supplied with numbered division cards, which correspond with the numbers on the schedule. All correspondence, contracts, specification sheets, and similar papers that have to do with a given job are filed in folders behind the correct division card. When a document refers to more than one job it is filed under the most important and a card is put in the other folders telling where it may be found.

**—which also takes care of letters and other documents**

This document and letter file is indexed with a card which exactly duplicates the information given on the card that indexes the folders for drawings. And in the same way as in filing the drawings, the document folders

**How costs are figured**

for completed jobs are placed in the less accessible drawers of the cabinet. This leaves the folders that are in regular, day-by-day use close at hand, ready for immediate reference.

The architect's time card is very simple. It merely lists the half hours in a working day, one above the other. When he is working on a job he checks off on the card the approximate time he spends on it. His draftsmen keep the same kind of cards. At the end of the day all the cards are assembled and filed in trays behind guide cards bearing the different job numbers.

The architect pays himself a salary, which he figures on an hour basis. When a job is completed he figures his labor time cost from these cards and posts it as a lump sum to the page in the ledger in which the job is recorded. There is no wasted effort in keeping this record, as it gives a certain check on the cost of each job, and shows whether or not he has made a satisfactory profit. The pages of the ledger are numbered and indexed in the same way as the files. The Roth school building, for example, is detailed on ledger page 3.

**Keeping track of the money**

In addition to the ledger, the architect also keeps a small cash book to record incoming and outgoing moneys; and a journal of non-cash transactions from which he posts to his ledger. These records, altogether, require but a very small portion of his time—perhaps it is necessary to make half a dozen entries each day.

A good feature of the numbering system which this architect uses is the way in which it can be extended to the numbering of drawings. Different drawings for the Roth school building, for example, can be numbered according to any method desired and will always be identified as belonging to the Roth school building by having the figure 3 prefixed to the distinguishing number. Thus, a drawing bearing the number 3-117 might be a full size detail of the brickwork in the Roth school building.

**How one photographer knows where he stands at all times**

"I believe," says this architect, "with the few records I keep, I could bring an outsider in here and have him perfectly familiar with the routine of my office in ten minutes."

"At the end of each day," says a photographer, "I know exactly how much business I did during the day,

and I can tell in a minute from my records whether I took in more or less than on the same date in previous years. I have the same knowledge for weekly, monthly, and yearly periods. Moreover, I know what I spent during each day, week, month, or year, and I can tell how it compares with the figures for corresponding periods of previous years. What I have done in this respect can be accomplished as effectively in any one-man business, I am sure.''

**45 minutes a day keeps up the records**

This is valuable information and yet keeping his records requires less than 45 minutes a day. First, he enters the sittings consecutively in a register, one to a line, and each line is numbered. When a customer has a sitting, he records the name and address, the amount paid on deposit, and a few details concerning the pictures that have been ordered, for future reference. At the end of the day these notations are posted to the cards shown in Figure 181 on page 345. One card is used to record all the details of one sitting, no matter how many positions may be taken. The cards are filed in alphabetical order. They contain a complete description of the whole transaction, including the full amount received from the customer, the date, the size and style of the picture, the number delivered, and the serial number that is given to the negative selected by the customer.

**An easy way to do an important task**

These cards serve as a cross reference on the register. They help locate the negatives if wanted, for the photographer can refer to the customer's name and get the number of the negative, which is filed numerically.

The card is arranged to take care of duplicate business. The space at the bottom is used for this purpose, exact information about the transaction—amount ordered, price paid, and like facts—being entered there whenever necessary.

In handling receipts, the cash register does most of the work. The business is on a purely cash basis, and whenever this photographer takes in money he registers exactly what it is for: that is, whether it is a payment for duplicates from old negatives or a sum received on account. A payment on account in this case, is the sum that the customer pays in when he receives his picture—in other words, the balance between the amount paid on

**A comparative record of business**

deposit and the total amount charged. The pictures are delivered only when the full sum is received.

At the end of the day he enters the totals of these three sources of income in a book ruled as shown in Figure 183 on page 349. One page in this book represents a month. Each line represents a day. This method of entry makes the receipts record very compact. There are two "total" columns at the right. One is for the daily total, and the other is used to sum up receipts for the week and month. This book is kept strictly up to date, and it is possible to compare present business—item by item—with the business for the corresponding day or period of preceding years, simply by turning back in the book to the proper pages.

**Accurate records that help out in financing**

This photographer enters his time, as well as his assistants', in the handy book shown in Figure 183 on page 349. The items making up overhead are also detailed and this makes it possible to tell just how much is spent any day or week or month for any particular item, as compared with other former periods.

This book also records the amount of stock purchased, itemized under the headings "plates," "paper," "mounts," and "chemicals." The totals are carried in two columns, the same way as in the receipts book.

With these simple records this photographer can show his bank his financial condition on a moment's notice.

The entire bookkeeping system of an eastern real estate man is contained in one looseleaf book. The pages in this book are about 8 by 11 inches in size. In the front of this convenient record there is a general day book, and property day books, one of the latter for each piece of real estate. These take the place of the old cash book and journal.

**How the ledger saves time**

The ledger contains only the regular balance sheet accounts and an individual profit and loss account for each piece of property. In the back are miscellaneous memoranda, such as rates of depreciation, inventories, and the like.

In the elimination of expense accounts from the ledger lies a great saving of time and labor. In general the plan followed is this:

First, in each property day book there are:

What the ledger contains

a. Cash received and spent columns
b. Separate columns for each kind of revenue and expense
c. Columns for capital and miscellaneous debit and credit entries (reference to Figures 185 and 186 will show how these columns are arranged).

Second, all receipts and expenditures and other debits and credits in connection with any piece of property are entered in their respective columns each month.

Third, in the ledger are:

a. The net totals of the revenue and expense columns direct to the profit and loss account for that piece of property
b. The totals of the cash columns to the general cash account
c. Each individual item in the miscellaneous columns to the account indicated in the explanation column.

Finally, the real estate man enters in the general day book such items as discounts received, interest received, collections, and other items which are not identified with any one piece of property; and also, at the end of the year, the profit and loss balances of the individual profit and loss accounts, in order to get them into the general income account.

A tickler for following up collections

To simplify matters still further, instead of opening an account payable with every man who sends a bill, he simply puts the bill in his tickler under the date on which it will be paid. When the due date arrives, it is paid by check and entered as a cash transaction in the proper day book.

"With so much of the monotonous routine of bookkeeping eliminated," says this man, "I welcome my bookkeeping work as an opportunity to study the results obtained from the different pieces of property."

A progressive pastor believes that churches would be much more effective in their work if they were organized and run on business principles. In fact the careful records this pastor keeps of his flock should suggest better methods to many men with small business offices.

Running a church on a business basis

"The activities of the church should center in the office," he says. "Comparatively few churches have effective offices. A real church office should be managed on the same principles as a good business office.

"The person in charge of the business office should be thoroughly well trained both as a secretary and book-

**Human records**

keeper and should be able to attend to matters of detail that arise. She (it is usually best to have a woman) should be capable of caring for all the correspondence of the various members of the staff. She must meet people effectively. In a large church she may need one or more clerks, according to the size of the church. Of course, the office should be equipped with telephone and office appliances, and every letter that goes out should be typewritten and when necessary a carbon copy thereof filed in its appropriate place. In many churches the financial records are not kept in the church office. But I think it better to have all the business transacted in the one place so that everything needed may be at hand.

"The human records of this department are highly important and those relating to membership should be in duplicate. I favor keeping these in a looseleaf ledger, which is preserved in a safe, while the same facts are duplicated in a card system for the uses of the office. On this card of members, shown in Figure 187, should be not only the name of the church member but also of the entire family, for our work should be with families as well as with individual members. In addition to this membership file, every church office will naturally have other files: prospective members, lists of men and of women, lists of societies and organizations, and the like.

**—that keep track of human members**

"Careful records lie back of the effective care of a congregation, and of all pastoral visitation.

"It is my thought that there should be contact with every member at least once a month. I consider these contacts, whether by visit or letter or telephone, in the same way as a sales manager who checks up the work of his salesman.

"Now, a business house may turn the entire establishment upside down to locate a lost penny. I would apply the same sort of method in finding the people of the neighborhood. If a member of the church is not present at service I want to know the reason why with just as much interest as Smith shows in discovering why Brown has not been sending in orders lately.

"The visitors turn in a card, shown in Figure 188, for each visit, giving the facts of the visit and, once a month,

we all meet in a general conference. In this conference we discuss specific cases. If a worker has had no success with a family, we talk over the case and try to find some way of reaching that family. There is always a way of reaching everyone. This might be called the science of religious salesmanship. Our problem, however, is not simply to get people to church—it is the welfare of the home and of each member of the home, in every possible way in which it may be promoted by the church. A church ought to be indispensable to its people because of what it does for them.

**Conferences have as great value here as in a commercial business**

"In addition to the personal visits, the best-managed churches get out letters to the congregation, publish bulletins and, in general, use the index to keep the church always near to the people. They try to make the church an integral part of the life of the community—they will not let people forget that they are alive and going ahead. They make it more difficult to stay away from church than to attend.

**Keeping up a live mailing list**

"Although the pastor is the executive head, he cannot manage church affairs solely on his own initiative. He must have his official board, vestry, or session, like a board of directors, that represents the church. I like a large official board so that the best brains of the church may be in the board. I want in this board all the clearest-headed and most progressive men and women in the church. I am willing they should differ widely in opinion as long as they allow free discussion and act by the decision of the majority.

"The dull, sleeping church belongs to a past age. In fact, such churches were always exceptions. We never should have such a powerful church today except that the churches of the past were very much alive. The modern church is in a divine sense a "selling" organization—it takes the precious values of religion, which are for time and eternity, and sees that they get to the people."

**Running a church like a sales department**

## CHAPTER XXIII

# GRAPHS THAT SHORT-CUT YOUR WORK

**A seemingly desperate case**

WHETHER to cut prices to meet competitors' bids was the question before the house one night when the lights burned long in the office of a Kansas printing concern. The president, who was also the head of the sales force, was a poor hand with money and accounts, easily discouraged, and rarely lost an order without feeling that the concern was destined to fail. As a business-getter he stood at the top. But buyers of printing knew his "panic" habit of mind and often forced him to shade prices until they scarcely cleared the cost sheets.

Across the table sat the secretary-treasurer—a younger man, self-confident, quick at figures and shrewd in money matters. As the "inside" head of the concern, he had followed the accounting for years and knew that the business was having a steady and healthy, although slow growth.

"But we've got to have the business," the older man was saying. "We've been running this shop for four years and yet you have to skirmish every month to meet the paper bills."

The secretary-treasurer turned over the books before him and read the figures year by year: plant inventory, stock on hand, total business done season by season, net profits, increase in average trade per customer, increase in number of customers, accounts receivable and so on, all down the line of business activity.

**—that figures apparently could not solve**

"And there isn't fifty dollars that we won't collect," he concluded. "But we've got to carry our customers a while."

The set face of the older man showed the intensity with which he was attempting to compare the unfamiliar figures as they were read to him.

"It sounds all right, but how about our bank balance?" he inquired. "Aren't we actually as poor as ever? I don't see how we can afford to turn down a dollar's worth of business that helps to pay running expenses."

**Drawing a picture of business conditions**

Still the senior partner was more hopeful—for a day or two. Then he slipped back into his former discouragement. The secretary said nothing. He was down at the office almost every evening. A week later he asked his partner to stay down with him and go over some new figures he had worked up.

"This is a picture of the business from the time we took it over," he said, unrolling a chart and pulling his chair up to the table. Month by month and year by year, he had grouped and plotted the various figures he had read at the other meeting. First came the line giving the inventory value of the business. It showed a continued increase. Following it came the other details, most of them indicative of prosperity. The bank balance made no great showing, but the next chart, 'total quick assets,' counteracted the gloomy impression.

**How graphs often show tendencies that figures do not**

"But here is what I especially want to talk about," said the secretary, after he had explained all the graphs except the last two. "You believe that my prices are rather stiff, and I believe that we net more by letting business go rather than to take it with only a narrow margin to work on. Between these two price policies, the figures must decide. Here they are." He pointed to the remaining charts, on which he had compared cumulatively for a series of months the "office" business and the "outside" business, with the net profit each had paid.

Forty per cent of the total business had been secured at an "office" price based on sound cost figures during those months. And that forty per cent had earned nearly two thirds of the total net profit.

"I see that you are right. Those charts have done me more good than anything I ever saw in my life," said the president, when, an hour later, the partners separated at the door.

**Many men don't understand figures**

That there are many business men to whom accounting comes no more naturally than to this president is strongly indicated by the many instances where a busi-

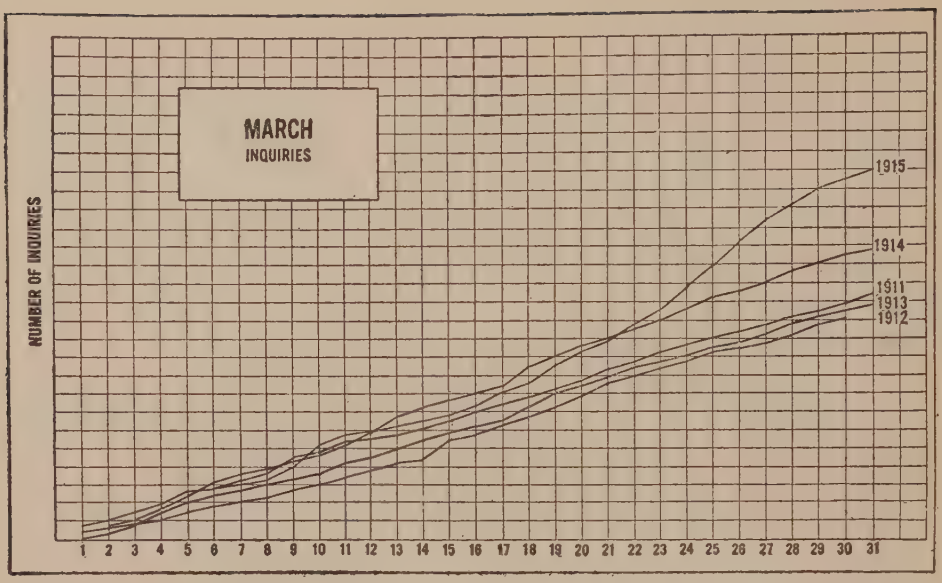



FIGURE 194: Sometimes it is well to keep close tab on the inquiries day by day, especially when a special campaign is on. This chart gives the inquiries received daily for five years, and shows an interesting comparison by which to judge the progress of the business from year to year. Inquiries, as you see, are tabulated over a period of one month.

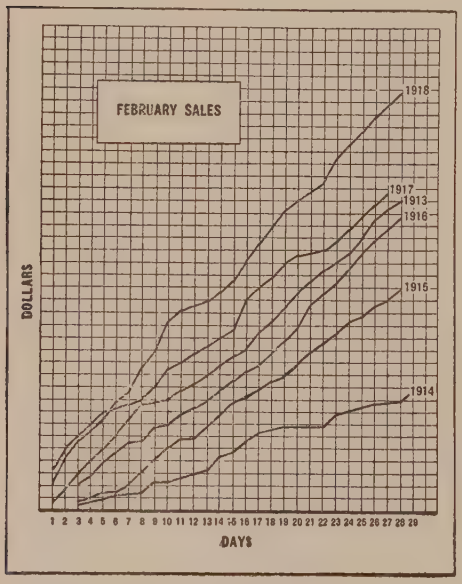



FIGURE 195: Taken together with figure 196 on this page, this graph was valuable in showing a condition in the business that might otherwise not have been quickly evident.

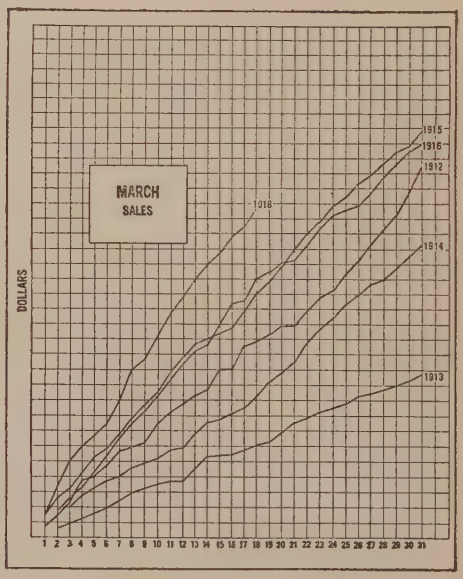



FIGURE 196: The method of plotting sales cumulatively gives the same result as if they are plotted as daily totals, but the curves are much more easily read as a rule.

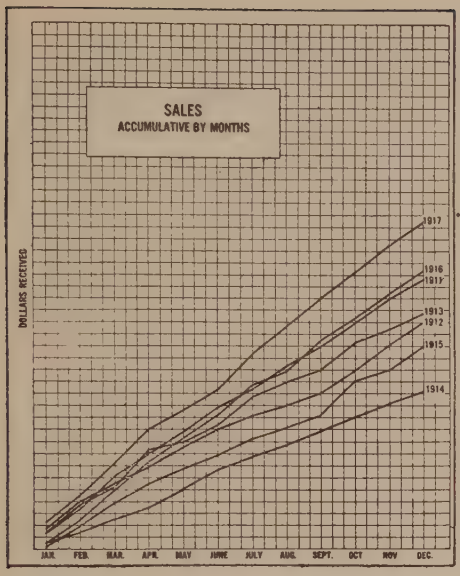



FIGURE 197: If the sales for the current year were to take a temporary dip under those of last year, the curve would show it at a glance. Such a dip would bear investigation.

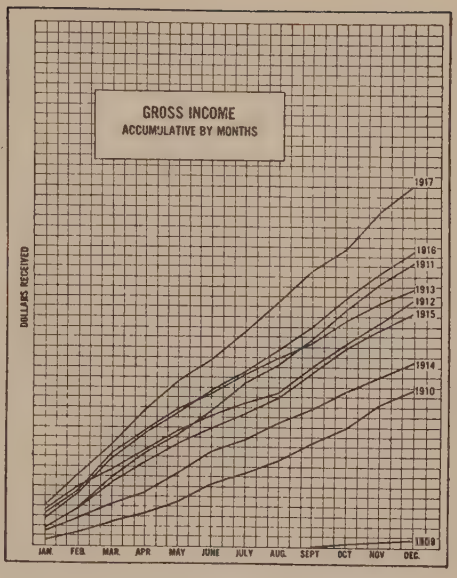



FIGURE 198: Valuable information can often be obtained from graphs that show the tendency of a business from month to month for successive years, if plotted on one sheet.

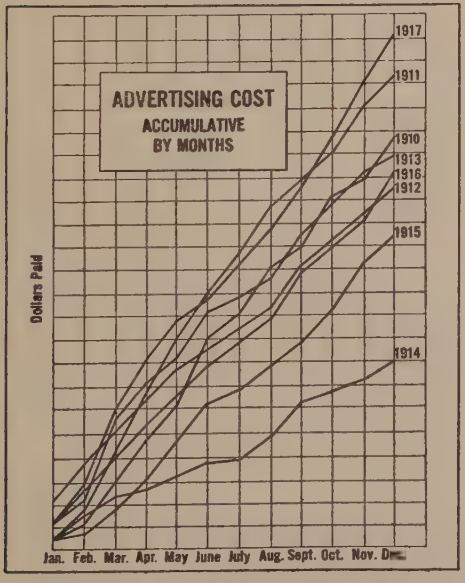



FIGURE 199: This "year after year" graph shows plainly how the advertising expenditure fluctuates. Taken together with other charts it is likely that the reasons will be apparent.

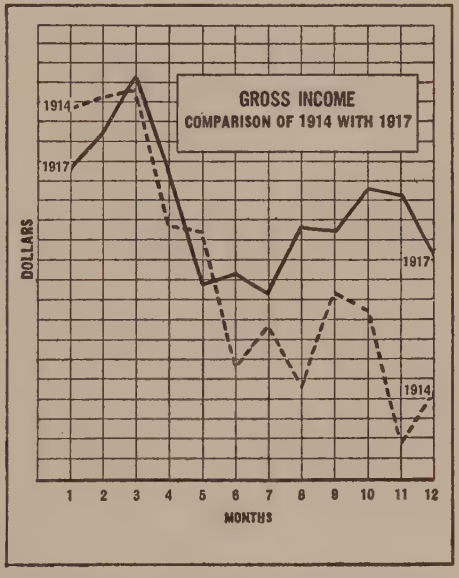



FIGURE 200: Very often it helps to know how the gross income compares from year to year. This simple graph shows it to one man much plainer than mere figures could.

**Then there's the time-saving features of graphs, too**

ness that had been driving toward the rocks was easily brought around when the manager finally put his figures into graphic form. "Using graphs results in an experience like meeting a man or seeing a photograph of a person with whom you have corresponded," said one manager.

The old-fashioned type of manager may have carried in his memory a certain group of figures, most of them unnecessary. From the three hundred business men who have helped with the study of working habits on which this article is based, however, it is evident that under pressure of complicated accounting problems managers are learning to have figures sifted, to get rid of detail and to make the important points stand out in high relief, as quotas by which to pace all departments. Getting at a glance all the necessary information is one of the little tricks by which efficient managers spread their energies over more work.

**What they can be made to show**

Take the retailer as an example. He wants to know all about his investment, especially his stock. He must watch his rate of turnover, his costs, his gross and net income, and his profit. He may wish to follow a particular item, as advertising expense, or sales, by two dozen lines.

Too much stock may be marked down; and it is for him to check on his buyers and advertising men. Sooner or later he will want to know which salespeople sell the most. Credits and collections, returns and complaints are to be controlled. Seasons and their effect on sales concern him. If his organization is to save time for customers he will want to picture the relation between the number of purchasers and the time of day or the day of the week.

The professional man, the head of production, the office manager, the head of a single department, similarly, have certain things to watch continually and others on occasion. Columns of figures are a tedious means for keeping in touch with all these facts. Graphs, kept up by a clerk and based upon carefully detailed figures, give the manager his story at a glance.

**Putting figures into "moving pictures"**

How to keep this moving picture of the essential trends, and from time to time to put a detail under the microscope, is so remarkably illustrated in the experience

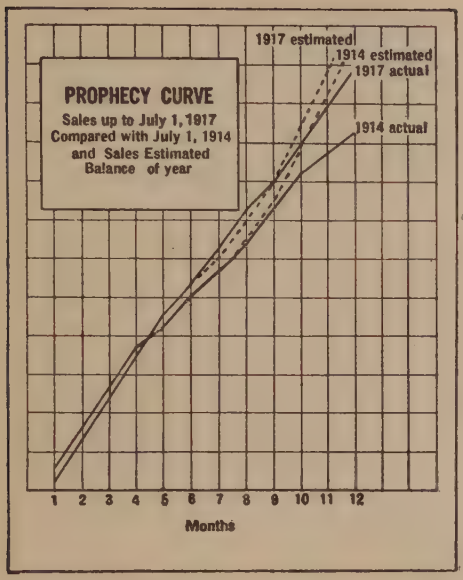



FIGURE 201: On page 374 you will find a description of how this interesting "prophecy" curve is drawn and used. Perhaps you can use one like this to advantage also.

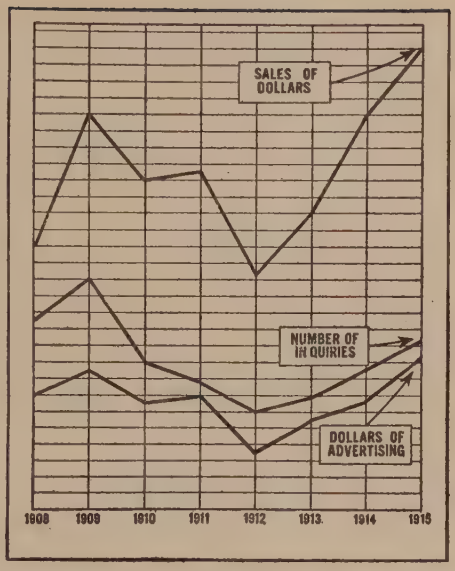



FIGURE 202: This graph shows the relation between advertising expense, inquiries, and sales. As they all rise together it is evident that the advertising money is well spent.

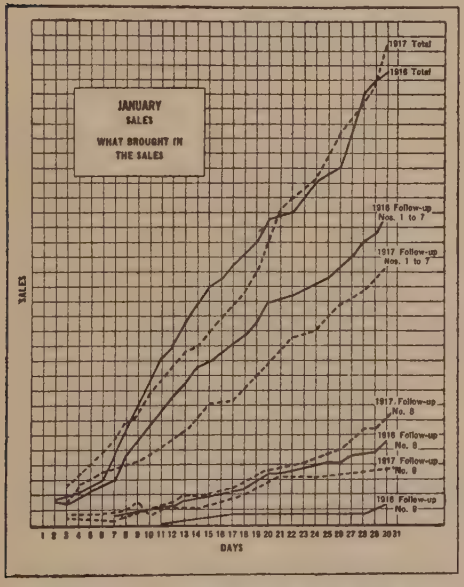



FIGURE 203: This graph not only compares two years' sales for January but shows what brought them in. As a test of sales plans it has been found effective in one office.

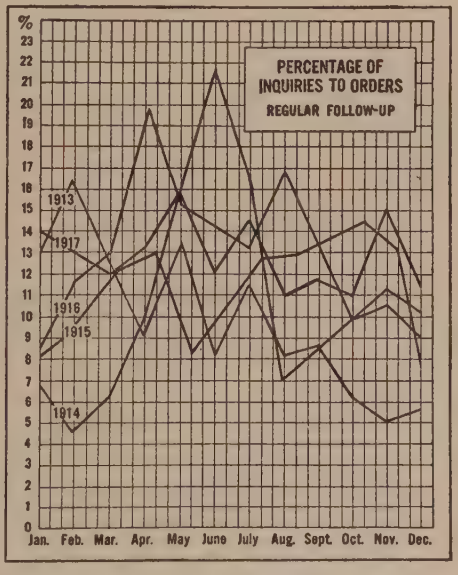



FIGURE 204: When several lines on one sheet cross and recross, making the curves hard to read, they may be drawn in different colors if it seems desirable and more effective.

**How to make effective graphic records for a business**

of one concern, that, rather than attempt to give the experiences which scores of men have contributed for this chapter—for example, a record that enabled a depositor to foresee a bank failure three years in advance, the sales thermometer in the office of Edwin Piper at the Battle Creek Sanitarium, the sales clock dial at the desk of Edward A. MacManus, general manager of the International Film Service, and the curve of gross business which enabled David Morantz at Kansas City to make the dull months of 1914 the banner months of 1915—it seems sufficient to show in detail how, by graphic analysis, one business was wonderfully stimulated, the volume of sales expanded, and the net profit for two years made to bulk equal with those for the previous six.

These results were made possible by C. K. Munns, an electrical engineer who became connected with The American Collection Service at Detroit. In this business very thorough records had been kept. These records, the engineer saw at once could be made to show the important facts about the business more clearly if plotted graphically, just as he had been accustomed to in his engineering work. A complete graphic record was accordingly built up.

**Eight problems that graphs analyzed**

As the production problem with this business has always been a simple one, practically all its important figures bear upon sales and finance. The graphic analysis took up:

1. The amount of business by days, months and years
2. The effectiveness of copy and mediums
3. How often to repeat the (inquiry) advertisements
4. The effectiveness of the follow-up letters
5. Classification of students by age
6. Sales by territories
7. Seasons in selling
8. Income, costs, and profits.

The charts used by Mr. Munns are shown on pages 368, 369, 371, and 373.

Important points to watch for are clearly brought out by the charts. For instance, take two of the charts on page 368 (Figures 195 and 196) which show the total sales day after day.

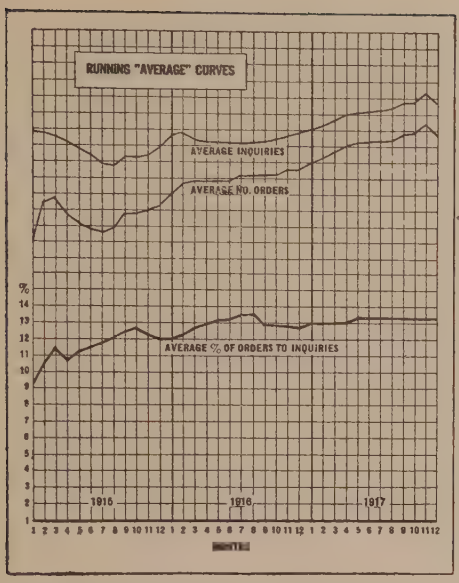



FIGURE 205: Sometimes average figures are better than the actual ones from day to day, as they eliminate what may be meaningless variations and indicate general tendencies.

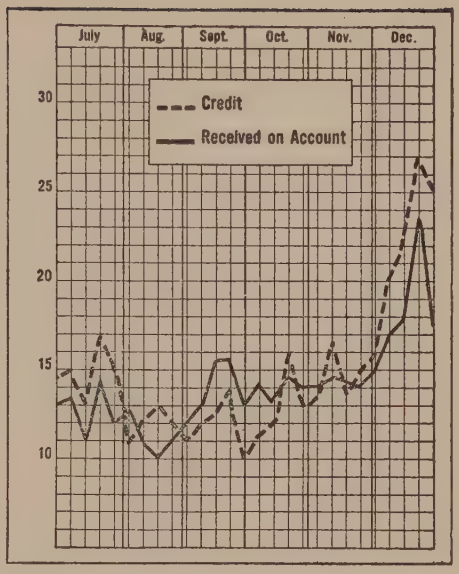
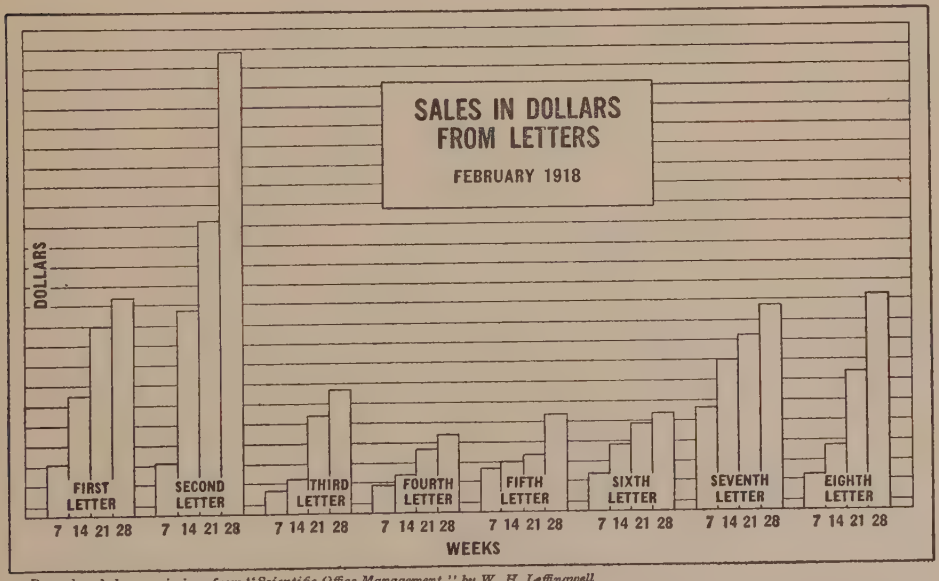



FIGURE 206: The relation between credit extended and collections made is important and the tendencies can easily be shown in any office by a curve like the one shown above.




*Reproduced, by permission, from "Scientific Office Management," by W. H. Leffingwell*

FIGURE 207: Whether you use letters to sell goods or to collect money it is essential that you know which ones are the most effective, so that they may be used to the utmost benefit. If the returns are tabulated graphically as in the chart shown here, it is easy to pick out the letters that really get the biggest results. Why not try the plan out yourself?

**A graph that checks up on follow-ups**

These two charts, built up daily from the office reports, enable the management to compare the same days and months for half a dozen years, so as to make the present September or October, if possible, the best in the business, and quickly to detect any slump in either the number of inquiries or the sales secured from these inquiries. The March graph shows the sales for 1918 six days ahead of March, 1915, the best previous year, and eight days ahead of 1916. On the thirteenth of March sales stood at exactly the same point as on the thirteenth of February. The question naturally came up: "Are the follow-up letters pulling exactly as they did last month?" A detailed study of the letters showed that quite different letters were doing the best work in March than in February.

In 1917 Mr. Munns had been following the fluctuations in sales by charting the income each month separately as compared with the same months in previous years (Figure 200), and also the cumulative total to date for each year. In June he noticed that these lines were closely following the trend taken in 1914, when for a long period conditions were far from satisfactory.

He at once worked out a "prophecy" curve (Figure 201) to get some idea of what the business needed to do the second half of the year. First he plotted the actual business done from June to December in 1914. Then he traced dotted lines for the supposed last half of 1914 and 1917, assuming that the business during the second half-year ran the same as during the first half. He did this by taking the total income up to June of each year, adding the May business to it for the July point, then the April business for the August point, and so on.

**How the "prophecy" curve works out**

This curve showed him that if he could hold up the second half of the year to the level of the first half, the business would be in satisfactory shape; but that the slump in the last three months of 1914 had been serious. The obvious step was to put the pressure on at once, and especially during the last three months of 1917, for extra gross income. How successfully he did this may be seen by the line which represents the actual income secured during the last half of 1917.

Beginning with the ninth of January, 1917, the daily sales for nine days fell below those of the previous year

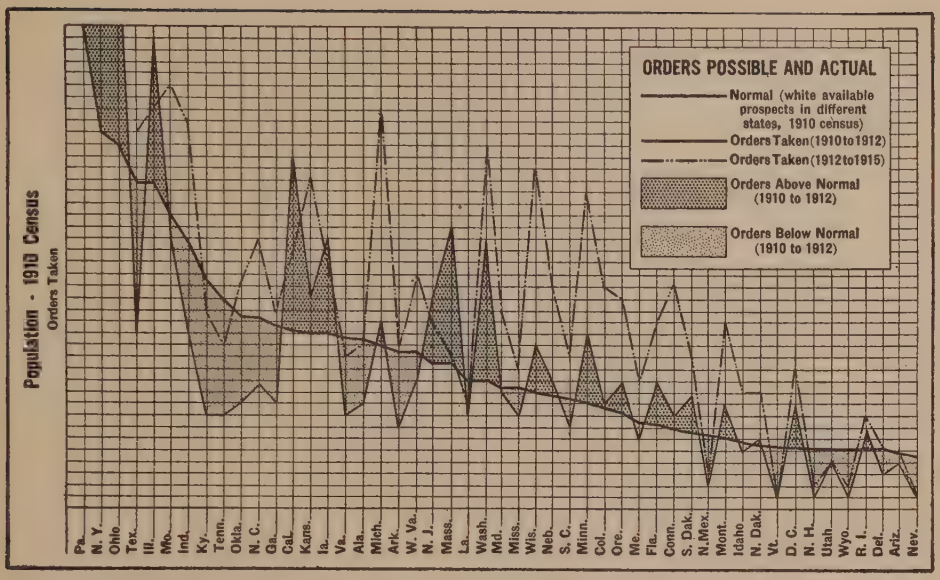

ORDERS POSSIBLE AND ACTUAL
Normal (white available prospects in different states, 1910 census)
Orders Taken (1910 to 1912)
Orders Taken (1912 to 1915)
Orders Above Normal (1910 to 1912)
Orders Below Normal (1910 to 1912)
Population - 1910 Census
Orders Taken
Pa. N. Y. Ohio Tex. Ill. Mo. Ind. Ky. Tenn. Okla. N. C. Ga. Cal. Kans. Ia. Va. Ala. Mich. Ark. W. Va. N. J. Mass. La. Wash. Md. Miss. Wis. Neb. S. C. Minn. Col. Ore. Me. Fla. Conn. S. Dak. N. Mex. Mont. Idaho N. Dak. Vt. D. C. N. H. Utah Wyo. R. I. Del. Ariz. Nev.

FIGURE 208: On this chart, which covers eight years' operations, are shown five sets of absolute figures and 10 sets of ratios. It is usually ratios such as "profit per dollar of sales" or "inquiries per dollar of advertising" that show perhaps the more important tendencies of a business. Graphs show these ratios in an easily understood, effective way.

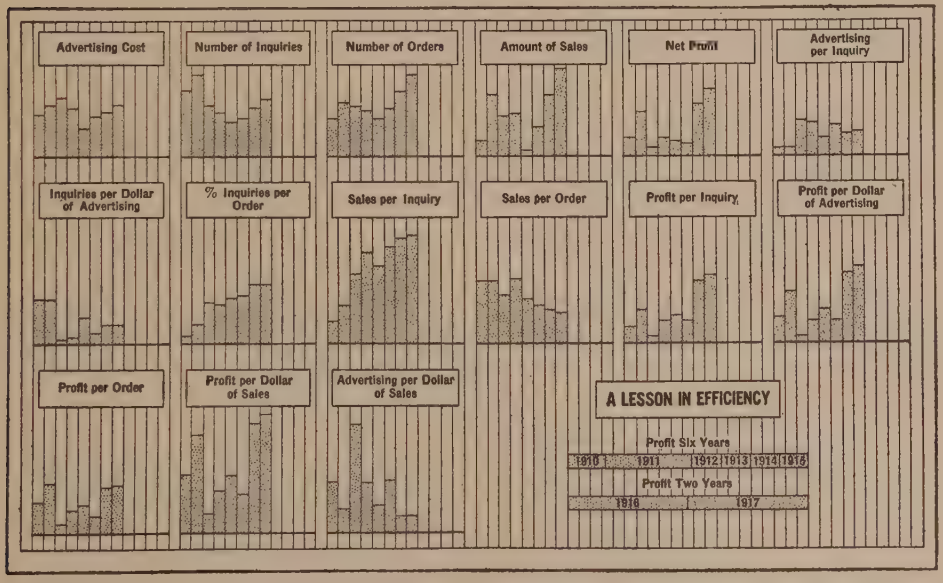



FIGURE 209: Do you know what proportion of the possible customers in a territory are buying from you? This chart shows how one concern finds out how much of its share it is getting. On page 381 you can learn how such a curve is drawn. You may want to make one for yourself, and it isn't such a big task to do it well as you perhaps might think.

**Building up a graph**

and took a line almost parallel to the unfavorable line of 1914. The purpose of the routine charts of a business is to give warning of conditions like this, so that the manager can make a further diagnosis before it is too late.

Mr. Munns, in order to find what part of his follow-up was at fault, divided the sales into (1) those brought in by his regular follow-up of seven letters (2) those brought in by special follow-up number 8, and (3) those brought in by special follow-up number 9 (Figure 203). When these figures were plotted for two years, it was evident that while the special follow-ups were doing exceptionally well, the regular follow-up was falling below its own record.

"Which of the seven letters was at fault?" was the next question. Mr. Munns turns the searchlight on every letter every week. Before he found the easiest way to do this, he tried several varieties of graphs.

**Sometimes it is necessary to try more than one form of graphic record**

His first plan was to draw four concentric circles, letting the smallest one represent the first week of the month, the next the second week. The difficulty with any irregular graph, however, is the task given the eye in comparing areas of different sizes and shapes. Although there are a dozen ways to picture figures, comparison is strongest when all the dimensions but one are standard.

The next plan Mr. Munns tried was to draw a column one space wide and twenty spaces high to indicate that letter number 1 had brought in 20% of the income for the week; adjoining it were the percentages for the second, third and fourth weeks.

**How to show which letters are profitable**

But the income varied so greatly that these percentage columns proved deceptive. So the plan finally adopted (Figure 207) is to show the income in dollars which each letter brings each successive week, month after month. This arrangement instantly tells everyone in the office which letters are least profitable, and does so much more clearly than statistics of returns per thousand, though these also are available for any letter that is being watched.

One of the most interesting in this series of charts is that which shows the running increase in the number of inquiries, the number of orders, and the percentage of

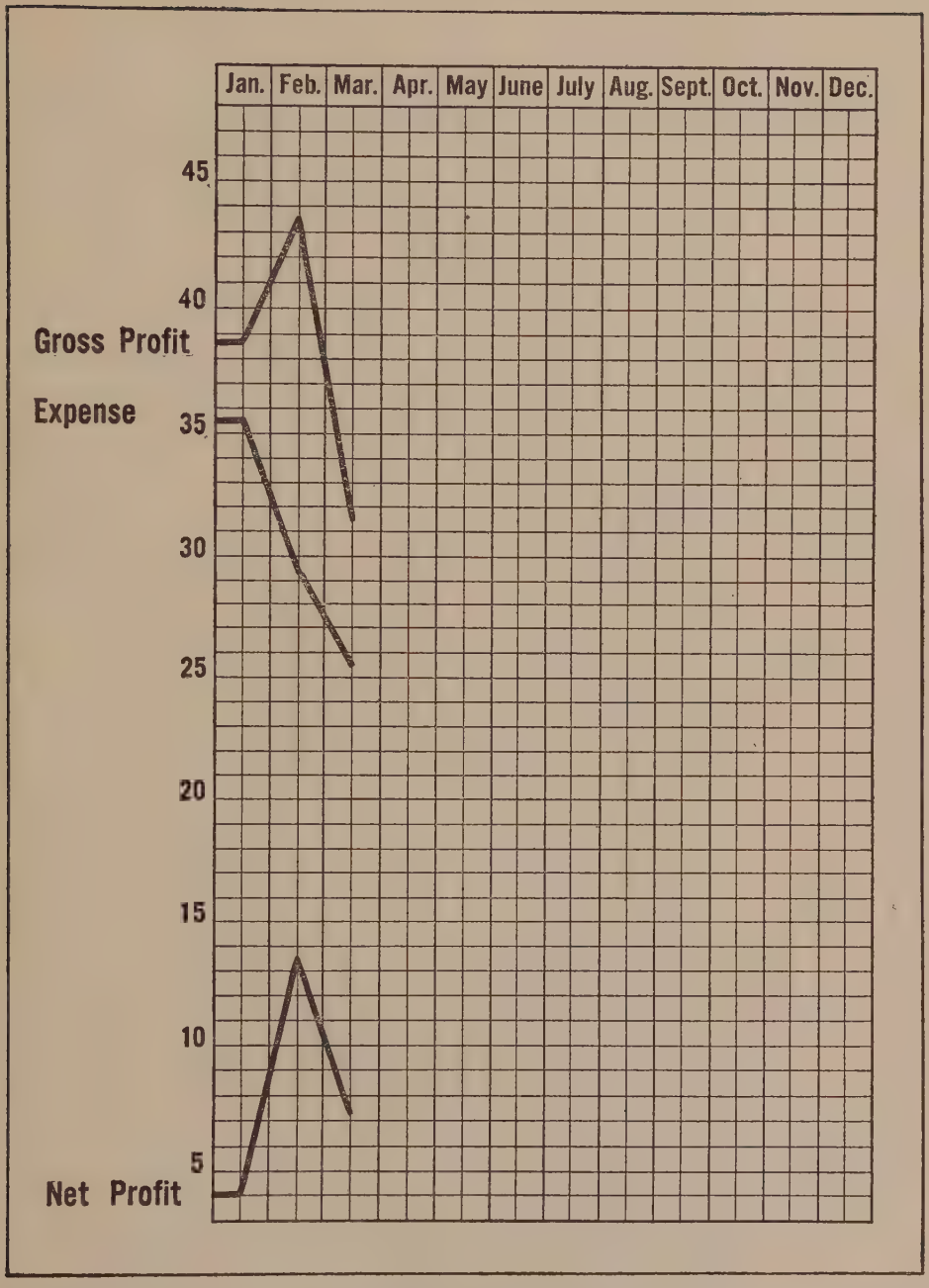



FIGURE 210: Many men can read graphs when mere columns of figures would not give them the information they want. That's why so many "make pictures of facts." This graph shows the tendency of the business from month to month. The "net profit" curve is found by taking the difference between the other two — a valuable "curve."

**Curves are plotted like this**

orders to inquiries (Figure 205). For all these curves, a column of figures is first worked that shows for each January, February, and the following months, the total number of inquiries or orders for the previous twelve months. Each month the current sum is added and the tail-end figure dropped.

On the cross-section paper, the vertical lines represent the month's record year after year, and the horizontal ones, the numbers of inquiries or orders. For each month the proper cross line is found and a dot made. These are then connected, giving a steady or "average" curve which will not fluctuate violently, and under favorable conditions should show a gradual rise.

**These curves could be widely and wisely adapted**

Figure 205 pictures the number of inquiries gradually increasing and the number of orders (with two exceptions) increasing still faster, or, in other words, the inquiries becoming better or more efficiently handled. It also indicates that the percentage of orders secured from inquiries has risen to an almost level plateau, which suggests practical perfection under the conditions.

What this series of charts did for Mr. Munns' mail sales, a similar series could do for a collection department, a sales force or a store. A Boston sales manager keeps column after column of figures to show all the calls made by his salesmen and what came of each. Such information might be easier to use, and have more use, if put in a graph.

A chart which has meant much to Mr. Munns' business is shown in Figure 208. It is a study of the number of students in each state as compared with the number of people among the state's population who count as good prospects. This number of prospects (male whites between certain ages) in each state was first secured from the census statistics for 1910.

The column of figures as arranged from the highest number down to the lowest, by states—Pennsylvania, New York, Ohio, Texas, and Illinois leading. The next step was to compile the number of actual students in each state.

**Charting prospects**

The total number of prospects divided by the total number of orders gives a basis for charting the two factors together; in other words, a space on the chart

**Charts can be easily compared**

equivalent to a thousand prospects is also equivalent, say, to five orders, making comparison simple.

The orders are then plotted state by state, the dots joined by lines, and the areas colored. Those below the line indicate bodies of prospects not yet sold up to quota, and the areas above the line indicate those states where, for some reason, usually known, selling has been intensive.

The round dots indicate changes in this sales total up to 1916. Many of the newer fields are being still more heavily worked at the present time and a new chart based on the 1920 census is likely to show comparisons of extraordinary interest.

The value of a chart similar to this to any sales manager with district men in the field is evident. Where sectional advertising, for example, is being used, such a chart, coupled with a knowledge of local conditions, makes for even distribution.

**Plotting human tendencies**

A line showing by its ups and downs the number of students of each age from fifteen to seventy-odd sheds another light on the selling problem. That the majority of the students are between twenty and thirty years of age, and that, after thirty, men seem to take stock of themselves about once in five years, with a constantly decreasing number risking a shift, are facts of distinct value to the men who write the advertising copy and the sales letters, and choose the advertising mediums.

To keep the main points of the business constantly before everyone concerned, Mr. Munns has reduced much of this type of foregoing information to simple block and line graphs, by month and year, which are grouped on two large wall charts. One of these is reproduced herewith (Figure 209).

**The "prosperity" curve**

A chart which is not reproduced has a curve representing business conditions (Mr. Munns also maintains for forecast purposes a curve—not reproduced in this chapter—showing the percentage of commercial failures to concerns in business). Below this "prosperity curve" appear in jagged peaks and valleys, month by month from 1910 to 1918, the number of inquiries, the total gross income in dollars, the total tuition in dollars and the total spent for advertising. Across these curves,

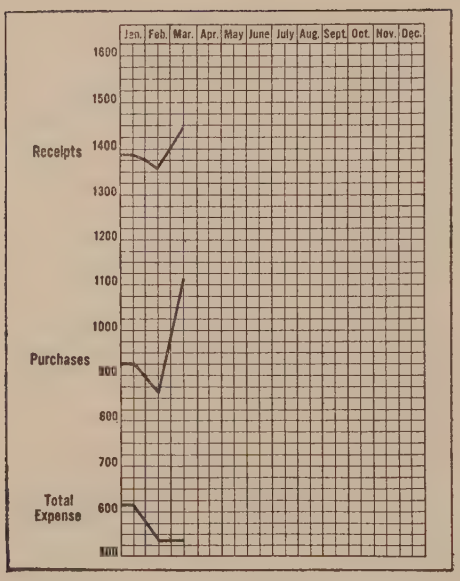



FIGURE 211: It's often well to keep purchases and expenses in line with receipts. That's what this sheet shows. A dangerous tendency shows in plenty of time to stop it.

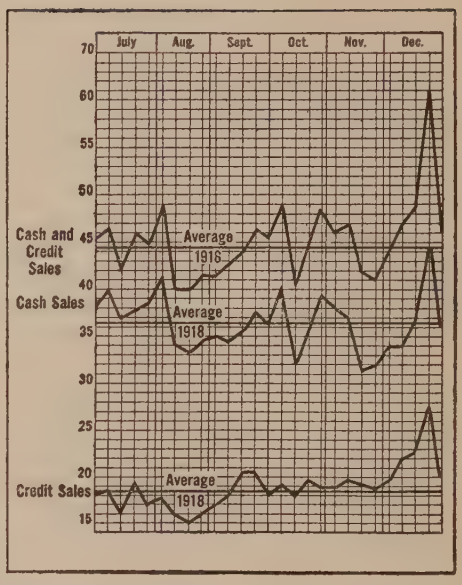



FIGURE 212: Again it often seems best to regulate the amount of credit business by the amount of cash sales. This graph shows the tendencies along this line, as you can see.

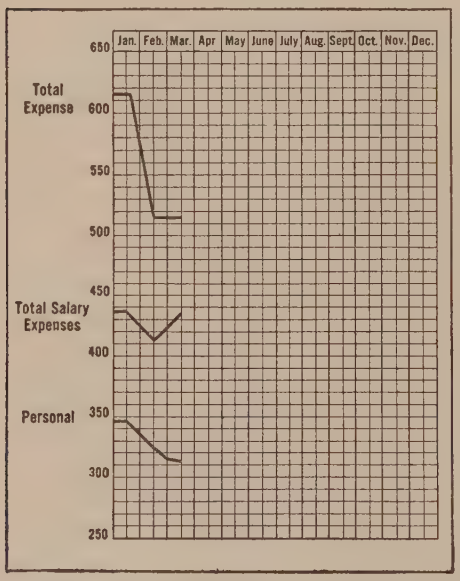



FIGURE 213: Expense is an item which every business man knows that it pays to watch. Graphs are well adapted to this use. Those reproduced above give one application.

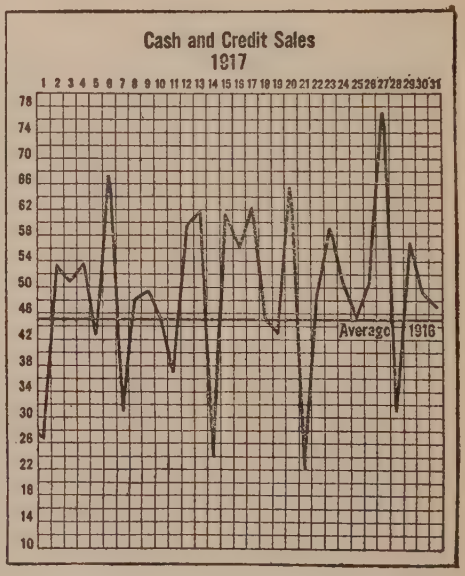



FIGURE 214: The total sales by days are plotted here with reference to average daily sales of the preceding year. This is interesting when compared with general business.

A tested graph for the man in charge of sales

arranged in a horizontal line for each year, appear in large blocks for quick comparison the total number of inquiries, the total income, the total tuition, the total advertising; and, in yellow—perhaps the color is used purposely, to indicate the gold left in the pan—the total net profit year by year.

The other wall chart (Figure 209) develops in annual columns of equal width and varying height the advertising cost, the number of inquiries, the number of orders, the sales, the net profit, the advertising per inquiry and the inquiries per dollar spent for advertising; the percentages of inquiries per orders, of sales per inquiry and per order; the profit per inquiry, the profit per dollar spent for advertising, the profit per order, the profit per dollar of sales, and the advertising per dollar of sales. This group of comparisons guards every loophole through which profits might possibly get away from us.

How to show net profits in graphic form

The net profit is variously shown by charts which could not, on account of space limitations, be reproduced in this chapter. In one of these charts, by means of columns of equal width and varying height, the gross income, the gross profit and the net profit for 1917 are laid over one another. Each year has a similar sheet. The percentages of net profit to gross income and to gross income less side lines are strikingly shown in another chart in which the precipitous rise in the rate of net profit since the business came to be directed by means of graphs—nearly 300%—is extraordinary testimony to the value of good organization and cooperation under management which is closely informed of the trend of affairs.

Graphic charts often eliminate guesswork

"I have found," says Mr. Munns, "that it does not take long for curves to convince the skeptical. They will finally cause everyone to watch the changes faithfully every day and refer to the monthly and yearly graphs to settle any dispute. Without them, the business manager can guess; but with them, he not only knows where he stands, but can predict more correctly than in any other way. So I have come to decline an argument in our business until I can get the evidence before me in graphic form. And when I have done this, it is rarely necessary to argue."

**How graphs can be used to advantage by any concern, small or large**

You may feel inclined to say, "Oh, well, that's all right for the big business that can afford a lot of fancy work. My business is too small either to need or to afford graphs."

But on pages 377 and 380 are shown five charts used in his "small but growing" business by a progressive Canadian business man. Perhaps these charts are one of the reasons his business is growing. Certainly, you'll agree, it's mighty valuable to be able to "see" a business as he does. And he says: "It does take a few minutes a day, but I find it the most profitable way I can spend that time."

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